COMMERCIAL CAR JOURNAL

CONSTRUCTION SECTION follows page 84

THE MAGAZINE FOR TRUCK AND BUS FLEET OPERATORS

MT. MEKINLEY Where They Tote 'em in Containers



Watch the exhaust pipe opening. Here's one tip-off to the economy and efficiency of your diesel truck's performance. If you spot thick, bluish exhaust smoke, your truck is wasting oil. It's not delivering the performance you pay for.

Oil economy is just one reason fleet owners insist on Sealed Power Chrome-Cyclan Piston Rings for all their diesel jobs. In case after case large fleet operators report these rings show 70% less wear than cast iron rings. Time after time their records show how Chrome-Cyclan rings retain tension under high operating temperatures.

Prove to yourself how much penny-pinching power is packed into these rings. Next time try Sealed Power Chrome-Cyclan Piston Rings. With tractors, earth-moving equipment, stationary or marine engines, too...

IF IT'S A DIESEL IT RUNS BETTER WITH CHROME-CYCLAN RINGS

Would you like longer service with less maintenance? This ring will give it to you. Want to defeat excessive heat, forget about breakage, side-wear, friction and corrosion? This ring licks all these problems where other rings have failed.

What's more, because of Sealed Power's unrivalled diesel know-how, these rings break in fast. And because of the cyclan-plus-chrome combination, they last . . . and last . . . and last.

SEALED POWER CORPORATION . MUSKEGON, MICHIGAN

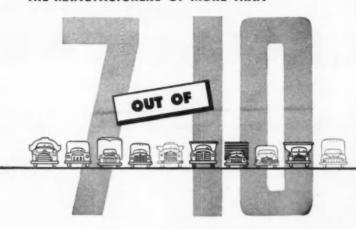
Sealed Power Piston Rings

PISTONS . CYLINDER SLEEVES

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THE MANUFACTURERS OF MORE THAN

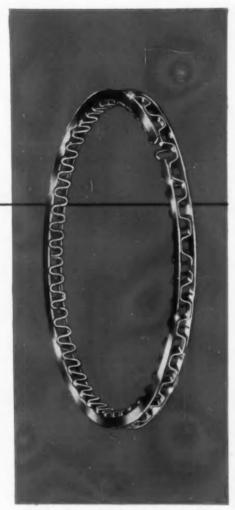


trucks in the United States today use Pedrick Formflex Rings

Pedrick Formflex Rings are used as original equipment and/or for official replacement service by the manufacturers who make 73% of all the trucks in use in the United States today.

In Pedrick Formflex rings, these manufacturers get the utmost Conformability, two to four times Longer Life, absolutely Uniform Tension, far greater Oil Drainage and independence from groove depths. These are the features which make top performance possible. No wonder so many truck manufacturers have selected Pedrick.

Furthermore, Pedrick Formflex rings are All-Purpose. They are guaranteed to outperform and outlast in any engine—new, rebored, resleeved, slightly worn or badly worn. So, to raise the level of performance in the engines of your fleet, always use Pedrick Formflex Chrome Ring Sets.





FORMFLEX CHROME PISTON RING SETS

WILKENING MANUFACTURING CO. . PHILADELPHIA 42, PA.

COMMERCIAL CAR

—January 1959 · Vol. 96 · No. 5—

THIS MONTH'S FEATURE



So you spend a week in Alaska covering every major city, observing its transportation system at work. What then? First is to "thaw out" the important facts. The ones you, the fleet operator, are interested in. That's what Editor Bart Rawson (center), Assistant Editor Jim Winsor (left) and Feature Editor Jack Colgan are doing here. Next is to put those facts into a readable, eye-witness report on how you can profit by what they do in . . .

Alaska 69	,
Up there containers are almost "old hat," are the bull of the operation rather than just a sideline with	k
Garrison Fast Freight 70)
Fishy-back, piggy-back and containers on trailer chassis are in daily use. Also a container user is	
Alaska Freight Lines 72	Ž
Garrison and Alaska Freight use the water route from Seattle, Wash. Some go all the way by road like	1

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To Stop Accidents—Try the Shock Treatment 78
Problem: To cut fleet accident rate in a hurry. Answer Add top brass to the safety formula
GM Introduces New Line of Diesels 8
Here's a look at GM's new V-block 71 Series from V- to V-16 also the 53 Series of smaller diesels
How to "Read" a Spark Plug 8:
George Galster, service manager, Champion Spark Plu Co., shows how to pinpoint plug troubles quickly
Montreal Transit's New Rebuild Shop 9
Here's a CCJ picture tour through the Cremazie shop. It fully equipped to handle almost any job
Spicer "Presto-matic" Transmission 9
Mack's Two New Six-Wheel-Drive Models 9
Bad Brakes Blamed for Run-Away 11
Reinforced Tire Chains Still Best

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JOURNAL

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How 3 National Fleets Cut Towing Costs with

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DETACHABLE TRUCK RETRIEVER CRANE



1. UNITED PARCEL SERVICE (San Francisco) saved \$800.00 in towing costs in just 3 months with a single WATSON TOWMASTER -the truck retriever that fits on any tractor fifth wheel to make a fast, efficient 1-man wrecker crane and retriever.



2. BARRETT U-DRIVE (Part of National Truck Leasing System) saved \$2,400 in towing costs within less than a year with their TOWMASTER at San Francisco. Lessor of more than 900 vehicles in Northern California, they use their TOWMASTER to retrieve busses, vans, tractors and taxis.



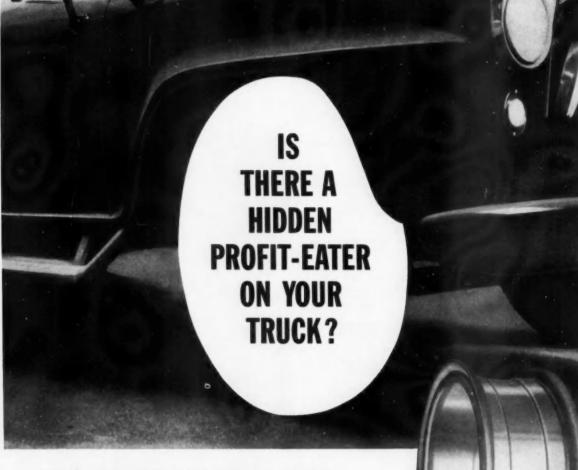
3. RYDER TRUCK RENTAL uses TOWMASTERS to exchange trucks and tractors in many of their 35 locations throughout the Southeastern U.S.—as well as for retrieving disabled rigs. One driver with a TOWMASTER-equipped tractor can exchange two units at a time at 50% saving in driver cost. Or in case of breakdown of a customer's truck, he can haul out a replacement and retrieve the diasabled unit. No need to keep a costly special wrecker on standby, or hire expensive towing services!

TOWMASTER Truck Towing Cranes can be attached to or removed from any tractor fifth wheel in 10 minutes or less. "Lift-off" winch makes it an easy one-man job. Has plenty of capacity for all highway breakdowns and most wrecks, too-even 3-axle rigs. Costs less than \$600.00 - why pay more? Write for free catalog today. Please address Dept. D-1.



H. S. WATSON COMPANY

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Here's how Goodyear Rims can lick the problem!

Lowest-cost-per-pound item on your whole rig is the rim. Yet it can easily turn out to be one of the most expensive — if improperly fitted. Rims that are improperly fitted can cause as much as 30% loss in tire service.

To avoid costly early tire and rim failure, it's common sense to specify the right size Goodyear Lightweight Rims—job-fitted by Goodyear to insure longer tire life. They help reduce such common causes of tire failure as tread

cracking, tread wear, sidewall failure, ply separation and bead failure.

Next time you think of rims, why not consider these savings you get with Goodyear Lightweight Rims. And you'll gain, too, from Goodyear's incomparable experience in building rims—the world's most complete line—for every type of vehicle. See your local distributor or write: Goodyear, Metal Products Division, Akron 16, Ohio.

Goodyear Lightweight Rim

First and only time-proved lightweight rim. Minimizes tread cracking, tread wear, sidewall failure, ply separation and bead failure.

Your tires go farther on RIMS by

GOODFYEAR

MORE TONS ARE CARRIED ON GOODYEAR RIMS THAN ON ANY OTHER KIND

THE OVERLOAD

E DITORIAL COMMENT

Too Much, Too Soon?

A SEXPECTED, the new federal budget as announced last month asks for a 1 to $1\frac{1}{2}e$ a gallon boost in the federal gasoline tax. On top of that, 45 state legislatures will meet this year, many infected with fuel-tax-itis.

One thing about it. Highway user groups are against tax increases as never before. On my desk right now are official resolutions from six national organizations. Among the carefullyworded "whereases" and "therefores" you find good and familiar arguments. Most center around the idea that users should not pay the whole cost of highway building. So they suggest:

- · Take a hunk of the national defense budget.
- Put all excise taxes into the highway fund.
- · Float a new bond issue.
- · Kill all diversion at the state level.

But there's just one joker in all of these arguments so far. The "invoice" is still there to be paid. You and you and I are still going to pay it, no matter how the tax bite is sliced.

It's then that you get thinking about the old law of diminishing returns. If the highway taxes go too high, we'll all start looking for ways of paying less.

Truck fleets, for example, can ship more and more by piggy-back or fishy-back. Worse yet, they can lose business outright to the railroads as the cost of operation goes out of line. Passenger car users can buy more and more midget cars (as 380,000 did last year). Since the little

cars use only half as much gas, their owners pay only half as much tax.

This could seriously cut the money available for highways, may force a cutback . . . or a lengthening out of the program. Is that such a bad idea?

The Highway Act of 1956 specified that the Interstate System be completed in 13 years, paid for in 16 years. Why? Because after much debate and compromise it appeared to be the best plan at the time. Is it today?

Friend of mine decided to remodel his kitchen. His first estimate included everything he wanted, came to \$5000. That he couldn't afford. So he trimmed back the plan to \$3000 and got the job underway. But you guessed it. The floor needed fixing, prices went up and before the job was half finished, actual cost exceeded the estimate by almost 50 per cent. So he cut back again. The finished kitchen will have to wait, but he still eats pretty well.

'Course he's a stubborn, old-fashioned cuss. (God bless his kind.) He could have adjusted his budget to pay over a longer period. And since his job is pretty steady, he probably could make that one too.

But let's face it. We all want all the highways we can get. None of us like the taxes it takes to get them. So while we should indeed join the fight against higher taxes, let's also be realistic about the size of the bill . . . or at least the time in which we have to pay it.

Bart Rawson

. 1959



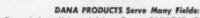
Concentrating on giving its customers the best and most dependable service possible, Pilot Freight Carriers Inc. of Winston-Salem, N. C., insists that every consignment be routed, dispatched and shipped on time.

Naturally, dependability and maintenance-free service take top priority in the selection of equipment for the Pilot fleet. Explaining his choice of new equipment, T. D. Nicholas, Director of Operations for Pilot said this, "Our 110 new Diamond T diesels are virtually trouble-free. They're out on the road making money . . . not tied up in the shop. The Maintenance Superintendent tells me we've never owned trucks that were any easier to service." As you would expect, every one of these 110 new low-maintenance trucks is equipped with a Spicer 14" two-plate clutch.

Built to deliver 100,000 or more trouble-free miles, these Spicer clutches employ an anti-friction design that reduces pedal pressure at the same time it insures chatter-free operation in both forward or reverse. To insure longest wear, uniform pressure is maintained at all times by permanently parallel contact surfaces that resist cocking at any degree of wear. But best of all, pressure spring tension can be readjusted in minutes, by almost anyone, without the use of special tools.

For simplest maintenance and longest wear, do as Pilot does . . . specify Spicer Clutches for your fleet replacement program.

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AUTOMOTIVE: Transmissions, Universal Joints, Pro-peller Shafts, Axles, Powr-Lok Differentials, Torque Converters, Gear Boxes, Power Take-Offs, Power Take-Off Joints, Clutches, Frames, Forgings, Stamp-

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INDUSTRIAL VEHICLES AND EQUIPMENT: Transmissions, Universal Joints, Propeller Shafts, Axles, Gear Boxes, Clutches, Forgings, Stampings.

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Marine: Universal Joints, Propeller Shafts, Gears, Forgings, Stampings.

Mary of these products manufactured in Canada by Hayes Steel Products Limited, Merritton, Ontario.

RAILROAD: Transmissions, Universal Joints, Propeller Shafts, Generator Drives, Rail Car Drives, Pressed Steel Parts, Traction Motor Drives, Forgings, Stampings.

AGRICULTURE: Universal Joints, Propeller Shafts, Axles, Power Take-Offs, Power Take-Off Joints, Clutches, Forgings, Stampings.



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Button

COMMERCIAL CAR JOURNAL, January, 1959

BIGGEST TURN SIGNAL NEWS IN YEARS!

K-D's New trouble-free

PUSH BUTTON SWITCH*

For Turn Signals and 4-Way Flashing

Here's the new flare type turn signal control you've been waiting for. It's as simple and wear-proof as your electric light switch. Push "L" button and left lights are on. Push "R" button and right lights are on. Push both buttons and all four signals flash roadside distress. Push top "C" button to cancel.

That's the simple story of the most revolutionary development in turn signal control for truck operation safety ever . . . and as you'd expect . . . it's by K-D Lamp Company's pioneering engineers.

LIFETIME GUARANTY KD 723 Push Button Switch has only a few working parts! There's nothing that will wear out. So, you get a lifetime guaranty against trouble.

EQUIP FOR SAFETY Before an accident to your truck delays your delivery schedule, get one of these positive-action *Push Button Switches* to take care of each unit . . . truck, tractor, panel truck, pickup truck, even cars. Ask your jobber salesman tomorrow about KD 723 Push Button Switch or Complete Set of Switch and Signal Lites.

*Patent Applied For



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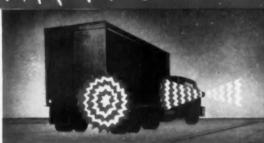
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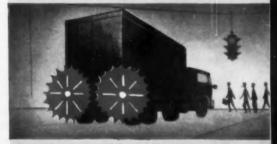
THE COMPLETE LINE Turn Signals, Truck Mirrors, Stop and Rear Lites, Reflectors, Clearance Marker Lites are representative of K-D's complete single source service of automotive Saftee Products



TURN SIGNAL Push one button... both front and rear signals flash light patterns. Fast sure warning that vehicle is turning or passing.



DISTRESS Until the driver can spot warning flares, he simply pushes both buttons and all four signals flash a warning that his unit is stalled and in trouble!



STOP AND REAR LITES The lamps in K-D's rear Class A Turn Signals become stop lites when brakes are applied . . . tail lites at night.





B.F.Goodrich Traction Express tires give fleet operator 50% more mileage than any other make

MEYER'S BAKERY of Blytheville, Ark., ships its products to the north-central states. Fifteen tractortrailers do the job, traveling 16 hours a day, 7 days a week. Dependability and extra mileage were two things this company needed from a tire, so they tried the B.F. Goodrich Traction Express. Read what Manager R. H. Watson writes:

"Traction Express tires give us 50% more mileage than tires previously used. Road delays due to tire trouble have been reduced 20%. We plan to make all our replacements with B.F.Goodrich tires, because they mean 'many dollars saved'."

The Traction Express tread is up to 33% thicker than that of a regular tire. Husky cleats take a non-slip grip on

pavement. Under the tread is the B.F.Goodrich FLEX-RITE NYLON cord body. FLEX-RITE NYLON withstands double the impact of ordinary cord materials, resists heat blowouts and flex breaks. No wonder this B.F.Goodrich cord body outwears even an extra-thick tread, can be retreaded over and over.

Truck operators call the Traction Express "the 100,000-mile tire". Why not see your B.F.Goodrich Smileage dealer today and find out how the Traction Express will give you lowest cost per mile. Your dealer is listed under Tires in the Yellow Pages of your phone book. B.F.Goodrich Tire Co., A Division of The B.F.Goodrich Co., Akron 18, Ohio.

Specify B.F.Goodrich Tubeless or tube-type tires when ordering new equipment



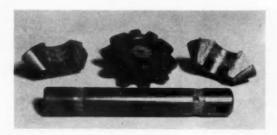
B.F.Goodrich truck tires

CB. F. Goodrich Company



AT YOUR SERVICE

TIMELY NOTES ON MAINTENANCE AND OPERATION Edited by Ed Shea, Technical Editor



"What Done It"

THESE DIFFERENTIAL parts were damaged due to reinstalling scored parts. They came from a light Chevy pick-up used as a service truck. It came in the shop because of a leaky left rear axle oil seal. The mechanic removed differential housing cover and found the cross shaft lock pin sheared off. After drilling out the broken lock pin, the cross shaft could not be pushed out. It was frozen in the two pinion gears. After some heavy pounding on the shaft, one pinion gear split. This released the shaft which was found to be badly scored.

Investigation revealed this unit had been shopped 2500 miles previously for a leaky right rear grease seal. The mechanic who did that job said the shaft was a little rough when reinstalled but not enough to cause any trouble. The driver informed us he had been stuck in snow and had done quite a lot of wheel spinning before moving. Spinning one wheel at high speed puts an extra strain on the pinion gears.

Conclusion was that this extra strain caused the rough shaft to "wipe" the grease out of the gears causing excessive heat. This finally caused the gears to sieze on the shaft. Moral: When in doubt about a worn part, check with the shop foreman about reinstalling it.

Why a Cam Dwell Meter?

SOME SHOPS do not use cam dwell meters in checking distributor point gap. You may get a precision adjustment with a feeler gage—if everything is in good condition. But you can't check the point gap under actual operation with-

out a cam dwell meter test. Cam dwell—the amount of rotation in degrees that the points are closed—is the best test of distributor operation and point setting. Note: Regardless of cam dwell reading, if the dwell meter reading changes more than three degrees at constant high speed operation, you should check for wear in the sub-plate bearings or in the distributor shaft.

Watch Dodge Head Gaskets

DODGE SENDS word that cylinder head gasket installation on its '59 315, 318 and 354 cu in. engines needs care.

On the 315-cu in. engine with double rocker shaft—using the standard steel cylinder head gasket—apply sealer on block side only. Place steel gasket on block and composition gasket on top of it. Gasket sealer is not necessary on either side of the composition gasket. Reinstall cylinder head and torque head bolts to 85 lb ft. Start engine and allow to reach normal operating temperature. Then retorque all head bolts again to 85 lb ft.

On the 318 cu in. engine with single rocker shaft and the 354 with double rocker shaft, install steel gasket using gasket sealer on both sides. Torque cylinder head cap screws to 85 lb ft. Do not retorque after initial torqueing.

Removing Broken Axle Stubs

REMOVING broken axle stubs can be a time consuming job. Here's a tip that speeds the work. Tack weld two welding rods together end-to-end, making an extra long rod. Insert into a length of heater hose and push the hose and rod into the axle tube until it contacts the broken stub.

Clip one electric welding clamp to the rear spring or other spot that makes a good ground. Clip the other electric welding clamp to the extending end of the rod and weld the rod to the stub. Once the rod is welded to the stub, the stub usually can be easily yanked out.

(TURN TO PAGE 12, PLEASE)

WAGNER LOCKHEED withstands today's high



- DESIRED COEFFICIENT OF FRICTION
 Maintaining Life Long Frictional Value
- 2. LONG LINING LIFE
 Resistance to Braking Temperatures
- 3. RELATIVE FREEDOM FROM TENDENCY
 TO SCORE DRUMS
- 4. QUIET OPERATION
- 5. NON-OFFENSIVE ODORS
- 6. NOT UNDULY SENSITIVE TO MOISTURE
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- 8. MINIMUM SWELL TENDENCIES

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LOCKHEED BRAKE PARTS, FLUID FYCHANGE SHOES and LINING . AIR BRAKES . TACHOGRAPHS

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This complete line of modern brake lining ... and blocks...provides you with correct choice Engineered for your heavy-duty service needs

Today's brake linings may look like the linings marketed over the past twenty years. However, due to continuous research, advanced engineering, and improved formula—Wagner's linings have gone through a process of evolution that makes them more than adequate for modern braking...Today, Wagner offers you a wide choice to meet your needs.

You'll like the way the new Wagner Lockheed Heavy-Duty Brake Lining withstands today's high braking temperatures. It resists heat with very little loss of friction or wearing qualities.

Engineered to meet the rigid demands of present-day over-the-road driving, Wagner Lockheed Brake Lining wears slowly and evenly. Brakes require fewer adjustments even though subjected to heavy-duty service under severe driving conditions.

This high-quality lining is uniform in density and in frictional qualities throughout entire service thicknesses. Lining will not compress, absorb moisture, or deteriorate with age. Contains no harmful materials to damage drums.

YOU HAVE A CHOICE...Wagner Lockheed Brake Lining and Blocks are available in sets. Slabs are made in combinations of radius, thickness and width for use on practically every heavy-duty vehicle.

You can benefit, too, by purchasing all your brake service needs—Wagner Lockheed Hydraulic Brake Parts, Fluid and Lining—from one dependable source...Your nearby Wagner supplier.



EXCHANGE SHOE SETS save you time and money. "HOW-TO-DO-IT" Installation Instruction sheet is included with each set. Shoes are lined with Wagner approved lining—contour ground, ready for installation.

For details on the complete line—mail the coupon for your free copy of Catalog AU-500.



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Please mail us a FREE copy of Catalog AU-500 on the Wagner line of Hydraulic Brake Products.

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How to speed up your fleet maintenance operations—

This new, free, 12-page Oakite booklet gives money-saving bints on how to clean up the fleet!

CONTENTS

- cold cleaning of
- cleaning engines
- · hot tank cleaning
- steam-detergent cleaning
- conditioning cooling systems
- paint stripping
- pre-paint conditioning
- body washing
- interior tank cleaning
- garage maintenance

Oakite has helped fleet operators clean up for the last 49 years. A half century of research and experience has resulted in a complete line of detergents for every fleet cleaning need.

These materials, their application, and the latest Oakite cleaning techniques are outlined in this folder.

Send for your free copy today. Write Oakite Products, Inc., 52G Rector Street, New York 6, N. Y.



Export Division Cable Address: Oakite

Technical Service Representatives in Principal Cities of U. S. and Canada



Continued from Page 9

Watch Those Governor Spacers

GOVERNORS on '58 Dodge D & T Series trucks equipped with dual carburetors utilize two spacers. Dodge says the thin 5/16-in. spacer goes between the intake manifold and the governor. The thicker 11/16-in. spacer is used between the governor and the carburetor. The governor will not function properly when the spacers are interchanged. Switching these spacers causes the carburetor throttle blades to interfere with the governor blade and force it open.

Snow Tires or Chains?

EVERY WINTER brings a debate on snow tires as compared to chains. One thing for sure: Good tires are just as important in winter as in summer. Unlike long underwear, nobody we know puts chains on late in November and keeps 'em on the wheels until Spring.

Few fleetmen are enthusiastic about putting chains on—taking them off. Yet in some places, "normal" winter weather demands it. In other places, selling chains is like selling ice to Eskimos. So your experience counts for a lot in deciding what's best for winter traction and safety. (As this is being written, Old Man Winter just dumped eight inches of snow on top of five feet in Oswego, N. Y. So up there, the present choice is "Buy a plow or sit still.")

Here's how the National Safety

Council sees it after tests in northern Wisconsin. And when they say frozen stiff up there, they mean rigid! When it comes to starting ability, reinforced chains are about 409 times better than good, regular tires on glare ice. Snow tires on glare ice did only 28 times better than regular.

In loosely packed snow, the starting advantage of reinforced chains ranks 313 times better than regular tires. Snow tires do 51 times better.

Once you start, how about

tire

DEC

SUD

stopping? National Safety Council's tests were made at 20 mph, turned out this way....

On glare ice, average passenger car braking distance with reinforced chains was 77 ft. Snow tires did it in 174 ft and regular tires in 195 ft. In loosely packed snow, the average for a passenger car with reinforced chains is 38 ft as compared with 52 ft for snow tires and 60 ft for regular tires. For comparison purposes, good

(TURN TO PAGE 16, PLEASE)



MORE ORIGINAL AND RECAP MILEAGE AT LESS COST

With Lee Super DeLuxe Highway Nylons you can be sure of it

You can have your truck tire economy as simple as 1-2-3 with Lee Super DeLuxe Highway Nylons. These outstanding tires give you 1) long original mileage; 2) extra recaps; and 3) lowest possible cost per mile. The three big advantages that add up to sure savings.

Not just *nylon*, but Lee Super-Tensile Nylon, goes into the construction of these tires. This tough cord provides the ultimate protection against the impact bruises, blowouts and moisture damage that take their toll of tires built with ordinary cord. And, during the Lee Super-Tensile manufacturing process, the cord is also treated with Double-Dip Flexlok, the super-adhesive that reduces the effects of heat and flexing and makes cord separation from the bond virtually impossible.

You get additional assurance of extra mileage with the wide, flat tread—made of the best type of smoked sheet natural rubber. Other Lee improvements in the tread design result in better traction and cooler running.

Equip your units with Lee Super DeLuxe Highway Nylons -tubed or tubeless-for more mileage and more recaps!

LEE RUBBER & TIRE CORPORATION

The Lee Super DeLuxe Highway. Whatever your truck tire needs, there's a Lee that's right for the job.

Lee Rubber & Conshohocken	Tire Corporation , Pa.		-	
Please send n Lee of Consh	ne your free catal ohocken's entire	og showing line of truc	k tires.	-
Name				

ANOTHER

SMASH HIT!

FROM GMC OPERATION "HIGH GEAR'



14

Mod

Only five months after the new D860 was introduced, 932 of them were setting new economy and performance records in 186 major fleets!

HERE'S WHY NEW D860 GMC's ARE

MAKING TRUCK HISTORY! • Lightest weight 90" BBC in its class • Hauls up to 1,270 pounds more payload • Most economical diesel on the road • Only diesel with fuel-saving economy range governor and automatic fan that saves on fuel—increases horsepower • Flexible, hauls up to 40-foot trailers in 50-foot states.

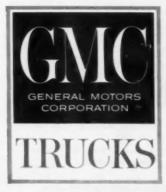
This is more proof that the industry's most dynamic engineering, design and qualitycontrol program, GMC Operation "High Gear", is paying off for you!

THESE PROFIT-CONSCIOUS FLEETS HAVE ALREADY PURCHASED NEW GMC 860 HIGHWAY HAULERS

Arkansas-Best Freight System, Inc. •
Akers Motor Lines, Inc. • Cooper-Jarrett, Inc. •
Dance Freight Lines • Ellis Truck Co. •
Esso Standard Oil • Federal Express •
Great Southern Trucking Co. •
Gordon Transport • Jack Cole Co. • Kroger Co. •
Lloyd Fry Roofing Co. • McLean Trucking Co.
• Point Express • Red Star Transit •
Roadway Express • Shippers Dispatch •
Southwest Freight Lines, Inc. •
Terminal Transport Co. • and over 100 more!

Get complete details. Find out firsthand what these revolutionary D860's can do for you. Call your GMC Dealer or mail this card for prompt action.

Illustrated at left— Model, D860—GCW, 60,000-65,000 lbs.—Engine, 6-715E diesel, 189 or 210 H. P.—Weight, road-ready (140" WB), 10,445 lbs. total



GMC Fleet Sal GMC Truck & 660 South Bou Pontiac 11, Mi	Coach Division levard East
Please give thi	s request your immediate attention. I am interested
	The catalog "Take the EXTRA PROFIT Route" that fully explains all the power, weight and dimension advantages of the new D860.
	The "D860 Job Test", the GMC demonstration plan where my drivers will put the new D860 through its paces on my routes.
NAME	
POSITION	
COMPANY	
ADDRESS	

From ½-ton to 45-ton . . . General Motors leads the way!



Continued from Page 12

regular tires stop a passenger car on dry pavement in about 21 ft at 20 mph.

The Council adds this note: Watch for rising temperatures. Cars with regular tires moving at 20 mph on glare ice at zero temperature take about 114 ft to stop. At 30 deg, this increases to 235 ft! Also note: The above stopping distances don't take into consideration reaction time which adds another 22 ft (traveling at 20 mph) to the above figures.

Watch Loose Shock Brackets

N '58 DODGE Model No. D100 trucks operating under severe conditions with an overload, the rear shock absorber bracket attaching bolts and nuts may become loose. If these are not securely tightened, damage to the rear brake tube may result. If the left rear bracket is loose, the brake tube attached at that point should be carefully inspected. If damage or weakening due to flexing is evident, the tube should be replaced.

Securely tighten the shock absorber upper bracket to frame side rail upper flange and the bracket reinforcement to lower flange of the side rail. Then it is advisable to double nut the three bolts involved. Should the upper mounting bracket break, it can be strengthened by welding it to the reinforcement along the upper edges where the reinforcement extends up above the frame side rail. To assure proper alignment of the parts involved, the welding should be done while the mounting bracket and reinforcement are attached to the frame side rail and with the shock absorber upper mounting stud and spacer in position.

"Moly" Grease Tests

EARLY LAST month, we were in New York City, heard Climax Molybdenum Co. report on advantages of molybdenum disulphide chassis grease. Climax reports "Moly" grease reduced passenger car steering assembly wear by well over a third, suspension point wear by over a quarter as compared with conventional chassis grease. Results were developed from a two-year. two million mile road test.

One advantage reported by Climax is that the "Moly" grease does a better job than conventional grease where the lube demand is not continuous . . . in steering, brake application and (TURN TO PAGE 20, PLEASE)

No - Shock Absorbers No - Levelling Valves No - Maintenance

MANUFACTURED BY BARTLETT TRAILER CORP. No - Interference with Brake Mechanism

No - Increased Compressor Capacity

(1) Lashing-Binder Chain Rings in Full Slide Rails

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16x7" Main Frame Beams

Sliding Tandem Assembly - 3" Increments – 15' Long

Air Ride with Individual Pontoons - Each **Axle Separate Controls**

S Air Ride Control Box — Rides 15# Empty -30 # 30,000 lbs. -45# 45,000 lbs. Payload

6 Coil Type Bottom — Coils Up to 54" Nest Solidly

7 Air Ride Air Tanks -Automatically Fills Chambers for Increased Loading

Does Not Use Up Air - Except On **Load Increase** Reduces Un-Sprung Weight -**Better Tire Mileage**



Molysulfide GREASE means full protection for the entire lube interval

Any good chassis grease that you use will do its job far better with Molysulfide added—whether for bushings, ball joints, fifth wheels, shackle bolts, king pins or other important bearing surfaces.

For good reasons -

Every oscillation between bearing surfaces wipes away grease. Every impact of shock load splatters out grease. Thousands of times between every grease job such action breaks the lubricant film, permitting metal-to-metal contact. Moreover, splashing roadway water washes away grease, permits metal-to-metal contact. These harsh contacts wear and damage bearing surfaces.

But Molysulfide, added to the chassis grease, bonds to the metal ... prevents metal-to-metal contact ... remains to lubricate and protect until grease is restored.

Nothing else equals the protection of a quality base grease with Molysulfide additive. You can *increase* equipment life and *decrease* costly off-the-road time.

Make your own road test-

Your name on your letterhead brings a free sample of Molysulfide heavyduty chassis grease. Address: Climax Molybdenum Company, a Division of American Metal Climax, Inc., Department 70, 500 Fifth Avenue, New York 36, N. Y.



These torsion suspension bushings prove the point: Heavy-duty trailer bushing at left was lubricated with a grease containing Molysulfide—is still in top condition after 135,000 miles. Bushing at right, lubricated without Molysulfide, had to be replaced after 35,000 miles.

CLIMAX MOLYBDENUM

Heavy-duty chassis lubricants containing Molysulfide are now available nationally. Order from any of these well-known manufacturers • The Alpha Molykote Corp. • Arkansas Fuel Oll Corp. • Bel-Ray Co. • Bemol, Inc. • Cities Service Oil Co. • Fiske Bros. Refining Co. General Petroleum Corp. • Gulf Oil Corp. • Jesco Lubricants, Inc. • Jet-Lube, Inc. • Magnolia Petroleum Co. • McCollister Grease & Oil Corp. • McGee Chemical Co. • MFA Oil Co. • Micro-Plate Lubricants Co. • Midwest Oil Co. • Orange State Oil Co. • Ore-Lube Co. • Panther Oil & Grease Mfg. Co. • Pate Oil Co. Schaeffer Mfg. Co. • Sinclair Refining Co. • Socony Mobil Oil Co. • Standard Oil Co. (Indiana) • Standard Oil Co. (Kentucky) • The Texas Co. • Tower Oil Co.



"They treat you fine at the Goodyear Sign!"

-where you'll find the best values in TRUCK TIRES to meet every need of Tonnage, Traction and Terrain-from pickup and panel-truck operations, to the biggest over-the-road haulers and earth-movers. All backed by years of experience . . . all expertly serviced at GOODYEAR DEALERS'.



RIB HI-MILER Best buy in the low price field

HI-MILER XTRA GRIP Year-round low-cost super-traction



TRACTION HI-MILER
Premium performance
at moderate price

MI-MILER CROSS-RIB Shatters highway tread-wear records

Hi-Miler-T. M. The Goodyear Tire & Rubber Company, Akren, Ohio

"Even on the Cross-Ribs

Why O.N.C.-SO. CAL. Freight Lines, San Francisco, Cal., has standardized on HI-MILER CROSS-RIB



"Tough runs and tough schedules, from Oregon to the Mexican border-that's us," Company President Carroll J. Roush reports.

"Take the 'Night Beat': 400 mountain-miles, San Francisco to Los Angeles — a run we have to make between dusk and dawn to deliver the goods on schedule.

"It's 1,100 miles (including the Siskiyou Mountains) from Los Angeles to Portland but we make second morning deliveries!

"We tackle Donner Pass snows to Reno, Mojave Desert heat to Imperial Valley — and with rigs running 78,600 pounds gross, traction, tread wear and tire-cost-per-mile were real *problems*.

"But Hi-Miler Cross-Ribs have all the right answers.

"Since 1957, they've taken our hottest hauls AND snow and ice. They've licked sideslips and skids—and wear so slowly, so evenly, we never reverse a tire.

"What's more—Hi-Miler Cross-Ribs give TRIPLE our former tread-mileage and plenty of recaps, too. They're the best time- and money-savers ever on our fleet!"

O.N.C.-SO. CAL. is typical of truck owners from coast to coast who are saving BIG with Cross-Rib. Get all the facts from your Goodyear dealer – or Goodyear, Truck Tire Dept., Akron 16, Ohio.

HI-MILER CROSS-RIB EXTRA RUBBER plus TRIPLE-TOUGH 3-T NYLON CORD

Usual truck tire tread depth. ● The HI-MILER CROSS-RIB has 60% thicker non-skid tread! ● Even Nylon cord must be tempered to be its toughest. Goodyear's exclusive 3-T process triple-tempers Nylon to make it TRIPLE-TOUGH — for longest tire life, most recaps, lowest cost-per-mile.



TRUCK TIRES by

Co

'Night Beat', triple our tread mileage!"



ODFYEAR

MORE TONS ARE HAULED ON GOODYEAR TRUCK TIRES THAN ON ANY OTHER KIND



AT YOUR SERVICE

Continued from Page 16

similar cases where lube action is periodic. Here's how Climax puts it. . . .

"Wear was reduced on brake

camshafts when 'moly' grease was used. City bus brake camshafts (26 per cent less wear with Molysulfide) were lubricated periodically as called for in the lubrication schedule. Tractor brake camshafts were lubricated only at the time of installation. Wear was approximately one third less than those using the conventional grease under these conditions. In the case of the parts that were periodically lubricated, there was little difference in the wear values of the parts lubricated with 'Moly' and those lubricated with the reference grease.

"'Moly' grease reduces wear on spring shackle pins. The city buses and Kenworth tractors use the threaded pin and bushing-type shackle pin, while International Harvester tractors use a smooth or plain type shackle pin. When the lube film is disrupted, the 'Moly' has a chance to add its extended lubrication qualities, but up until the time of disruption it has no effect.

"To illustrate this in the case

of the smooth pin, there is line contact subject to slight reciprocating motions caused by the up and down movement of the master leaf of the spring. This tends to wipe grease on a line contact from one side to the other, causing disruption of the film. It is here that the molybdenum disulfide addition seems to take effect and reduce wear.

"In the case of the threaded pin, there exists an ample supply of lubricant in the reservoirs provided by the grooves of the thread. In this instance there is no line contact, the molybdenum disulfide addition never has the opportunity to function. Wear reduction is of no significance under these conditions.

"The data obtained from

Fruehauf 'Gravity Torision' trailers showed less wear resulted when using the 'moly' grease in each group of parts under test. These parts are under heavy impact loads and constant reciprocating motion which results in disruption of the film. This allows the molybdenum disulfide addition to function significantly in reducing wear.

"The natural affinity of 'Molysulfide' for metal surfaces causes it to separate from the grease (TURN TO PAGE 24, PLEASE)



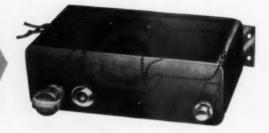
COLE-HERSEE MOTOR DRIVEN FLASHERS Safe and Reliable ALTERNATING WARNING SIGNAL CONTROL

- For school busses and emergency vehicles.
- Extra heavy duty 6, 12 or 24 volt usage.
- With or without harmmertoned box and with operating switches.
- For quiet, weatherproof and vibration free operation.
- Units conform to SAE recommended standards.

When ordering specify electrical load and voltage.

All units built for top performance. See your local C-H jobber or write Cole-Hersee direct for additional information.

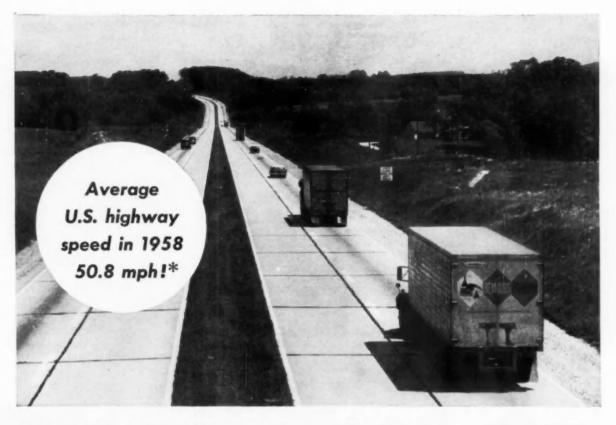
We will be at both shows: Booth 446 — AAMA — February 2-5, Coliseum, New York





Booth 144 - IASI - Feburary 18-21, Navy Pier, Chicago

Co



Can the brakes on your fleet withstand the heat and wear of today's speeds?

Higher speeds call for faster stops, balanced brake action from wheel to wheel and axle to axle. Unbalanced brakes, suddenly applied, can cause heavy rigs to jackknife. Excessive heat will cause some brakes to fade under steady application.

Through long experience, research, and exclusive manufacturing techniques, Grey-Rock offers Balanced Brake Blocks for any make and model truck or busblocks that assure fast, smooth, safe stops under all operating conditions. You can count on thousands more miles between relines—fewer drum replacements—lower maintenance cost—with Grey-Rock. For high-speed, on-schedule operation at the lowest-cost-per mile, see your Grey-Rock jobber.

*According to Bureau of Public Roads



BALANCED TRUCKSETS FOR LIGHT AND MEDIUM TRUCKS. Specially engineered linings, woven, molded, woven-molded combinations, for every make and model.



FOR SAFER, SMOOTHER STOPS AND STARTS

Only Grey-Rock makes

BALANCED BRAKE LININGS

BALANCED BRAKSETS * TRUCKSETS * BRAKE BLOCKS * VEE-LOK® CLUTCH FACINGS
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RAYBESTOS-MANHATTAN, INC., BRAKE LININGS . BRAKE BLOC(S . CLUTCH FACINGS . INDUSTRIAL RUBBER . MECHANICAL PACKINGS . ASBESTOS TEXTILES . ENGINEERED PLASTICS . SINTERED METAL PRODUCTS . RUBBER COVERED EQUIPMENT LAUNDRY PADS AND COVERS . ABRASIVE AND DIAMOND WHEELS . INDUSTRIAL ADHESIVES . BOWLING BALLS





THE BIGGEST SAVING BIG CHEVIES YET!

Here's evidence that the big new haulers of Chevrolet's Task-Force 59 bring you more to work and save with than ever before; proof that they've got more of what it takes to cut your costs and keep you going on runs that call for the best performance a truck can put out!

CHEVROLET

ALL-NEW WORKMASTER SPECIAL V8



Powerful addition to the heavy-duty engine lineup, this totally new money-saver boosts performance with 348cu.-in. displacement, 185 h.p. Built for durability and savings on heavy payload runs. Optional* on Series 70 and 80 models.

DURABLE WORKMASTER V8 ENGINE

Modern Wedge-Head design gets maximum mileage from regular fuel. Extra durability comes from heavy-duty pistons, Moraine "400" extremeduty bearings, induction-hardened crankshaft. The Workmaster V8 is standard in Series 90 and 100; develops 230 h.p. with 348-cu.-in. displacement and 4-barrel carburetion.



CHEVROLET TASK-FORCE 59 TRUCKS

TOUGH '59 HEAVY-DUTY TASKMASTER V8



Compact and efficient, this V8 is standard in Series 50 and 50H, optional* in 60 and 60H. Develops 160 h.p., 8.0:1 compression ratio, 283-cu.-in. displacement. Heavy-duty components mean less wear—bigger savings.

TWO GREAT TRIPLE TORQUE TANDEMS



Top tonnage haulers—G.V.W.'s high as 36,000 lbs.! Simplified design, chassis-mounted power divider with 3-speed auxiliary transmission, dual or single axle drive. Tough, durable, yet light in weight for bigger payloads.

NEW 50H AND 60H MODELS

Biggest savers of all big trucks! They spell economy with heavy-duty options*—springs, brakes and axles that boost G.V.W.'s up to 21,000 lbs.; handle hauls that usually require bigger, more costly units.

NEW L.C.F's WITH SPECIAL ADVANTAGES



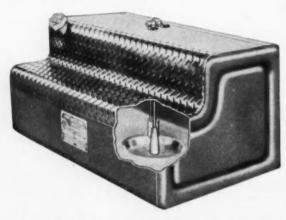
Compact (89¼", bumper to back of cab) models pull 35-ft. trailers yet keep over-all length to 45 ft. Short wheelbase for tight turns; G.C.W.'s to 48,000 lbs.

NEW MIGHT FOR EVERY BIG TONNAGE HAUL!

New close-ratio 5-speed transmissions* that team with 2-speed rear axles* for maximum over-the-road performance. Your Chevrolet dealer can show you these and other tough, money-saving components in Task-Force 59 trucks.... Chevrolet Division of General Motors, Detroit 2, Mich. *Extra-cost option.

Prior "L-STEP" SAFETY TANK

Prior Engineers designed special dies to emboss an impact relieving structural rib as an integral part of the fully flanged tank heads.



The threat of entry of foreign particles into the fuel line has been eliminated on all Prior Safety Tanks by the adoption of Monel Filter Tips. Fuel Supply lines are removable easily, with a wrench.



All Prior "L-Step" Tanks are equipped with a SUMP in the bottom of the tank permitting full utilization of the fuel capacity of the tank.

PRIOR PRODUCTS, INC.

Continued from Page 20

and plate out on these surfaces. This plated-out film adheres tightly and remains to lubricate when the grease is forced out, washed or wiped away because of mechanical motion or splashing water."

Ignition Tips for LP Gas Conversion

THERE ARE just nine particular points to watch for in converting a gasoline engine to LP gas use, says George M. Galster of Champion Spark Plug Co. First is compression ratio. Because LP gas has good anti-knock qualities, engine compression can be increased by approximately one ratio. This is generally done with special heads, planning existing cylinder heads or installing high dome pistons. It is usually advisable to limit the increase of compression to about one ratio. Increases beyond that can place undue stress on engine parts.

Second, it is sometimes necessary to install new thermostats and permanent anti-freeze for winter operation in order to maintain cylinder head temperatures between 160 and 180 deg F. For engines under heavy duty operation, additional radiator capacity may have to be provided. In extremely cold weather operation, it is sometimes necessary to use an immersion type or cylinder block electric warmer to provide quicker starting.

Third, since LPG is a gas under

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normal pressure and temperature, no heat is reqired on the intake manifold. In fact, higher density of charge can be maintained if exhaust and intake manifolds can be separated or "hot spots" insulated with a steel plate.

Fourth, to avoid excessive valve temperatures and possible valve sticking, it is often necessary to shorten valve guides which extend into the exhaust passages. This is particularly true of older engines. It is also advisable to check the engine manufacturer for different valve-guide stem clearances and tappet adjustments which they may recommend for such conversions.

Fifth, LPG gas has a narrower

flammability range than gasoline. It is advisable to use an exhaust analyzer to set optimum idle and high speed fuel/air ratios. This will also help improve cold starting. Be sure the analyzer is calibrated for LP gas. Don't use a gasoline or natural gas exhaust analyzer.

(TURN TO PAGE 28, PLEASE)



Unretouched photo of idler gear removed after 586,000 miles.

586,000 miles in 26 months is a real test of any truck. Yet this idler gear was the only part replaced on an 8-speed Fuller ROADRANGER® Transmission after 586,000 miles of service in an International DC205A Tractor.

The tractor is owned by Ryder Truck Rental of Miami. Leased to A. & M. Karagheusian, Albany, Georgia, carpet manufacturer, it has averaged over 5,000 miles per week since April, 1956.

Ralph Will, Albany Branch Manager of Ryder Truck Rental, says, "We're certainly pleased with the ROADRANGER'S performance. The record made by this unit is typical of the service we've obtained from all our ROADRANGERS."

"Ease of operation is important on

long hauls such as ours," says Arthur B. Lauman, Karagheusian's Albany plant manager. "Our men like the ROADRANGER'S closely-spaced gear ratios and single shift lever. Fuller's pre-selected automatic range shifts are popular, too."

For durability, economy and easier shifting, specify Fuller ROADRANGER Transmissions.



FULLER

MANUFACTURING COMPANY

KALAMAZOO, MICHIGAN

Subsidiary EATON Manufacturing Company

Unit Drop Forge Div., Milwaukee 1, Wis. * Sholar Axie Co., Louisville, Ky. (Subsidiary) * Sales & Service, All Products, West. Dist. Brunch, Oakland 6, Col. and Southwest Dist. Office, Tulsa 3, Oklas.

Automotive Products Company, Ltd., Brock House, Langhem Street, Landon W.1, England, European Representative



GIVES YOUR FLEET LONGER

"On-the-Road" Life!



Mobil's Simplified PM System improves fleet performance (and profits) by helping cut maintenance costs!

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One sure way of correcting "hit or miss" maintenance that shortens fleet road life is to use Mobil's Simplified PM System. It's a simple, easy-to-use plan consisting of a Record Folder, a Work Sheet and a Driver's Report. These three parts are supplied by Mobil, together with valuable advice on setting up a Control Blackboard, to keep you up-to-date on lubrication schedules. Mobil's PM System reduces your paper work and at the same time provides records that can help you determine the payload mileage of each vehicle. Best of all, it can help your fleet avoid excessive downtime, keep it on the road longer to make profits for you!



Another reason you're Miles Ahead with Mobil

Available—film on fleet safety, maintenance.

Call nearest Socony Mobil office.

SOCONY MOBIL OIL COMPANY, INC., and Affiliates: Magnolia petroleum company, general petroleum corporation

Q and A Bulletin



How to get the most value out of Bostrom Seats

Questions seem to come up now and then about the use and care of Bostrom "Level-Ride" 80 Seats. Maybe you've asked some of them; so, here are some answers. If you have additional questions, send them along. We'll answer them for you and perhaps cover them in additional messages like this.

Q: How do I justify the use of Bostrom "Level-Ride" 80 Seats?

A: The advantages of "Level-Ride" 80 Seats really return the nominal additional cost many times over. Their big feature, of course, is that they remove 80% of vibration and road shock from truck driving. This reduces driver fatigue, makes drivers more efficient, more productive, safer, more profitable. Rest stops may be fewer and shorter. Scheduling improves. Driver turnover tends to go down. Driver respect for equipment goes up, which improves equipment handling. These and other advantages contribute to cost reduction and im-

Q: What are specific benefits to my company?

A: Because "Level-Ride" 80 Seats take 80% of jolts, jars and vibration out of truck driving, many driver benefits follow. Obviously, there are health benefits. Reduce vibration and shock and you have healthier, happier drivers—better "good will" men when they contact customers and the public. Being less tired at the end of the day, drivers are happier on their jobs and at home, too. Also, since fatigue is an accident-prompter, Bostrom "Level-Ride" 80 Seats increase driver safety.

Q: How long do suspension seats last? Do they stand up as well as standard seats?

A: Generally, a Bostrom "Level-Ride" 80 Suspension Seat will outlast a standard seat. Much of the movement which wears out a standard seat is absorbed in the suspension system. This applies particularly to seat cushions and cushion springs. In all respects, Bostrom seats are built to high-quality, long-life standards. It must be remembered, however, that a truck suspension seat is a machine—with working parts subject to wear just as parts of all machines are. The seat could not provide the many benefits it does without being so. This does not mean shorter life than a standard seat, but it does mean that some attention must be given suspension seats in order to maintain their built-in long life.

Q: What attention and maintenance are required on suspension seats?

A: The primary requirement is periodic inspection of the seats. Points to check particularly are the seat mountings, the linkage between the mountings and suspension arms, bearings and rubber torsion springs. Especially check for loose seat mountings. If the seat becomes wobbly due to loose mountings, linkage and bearings are likely to suffer unnecessary wear, which in turn may adversely affect the torsion springs. Always be sure mountings are tight. Should wear show up on the linkage or bearings, replacement of these parts is recommended. This is very inexpensive and simple to do. Bearings otherwise should require no service because they are lifetime-lubricated with molybdenum disulphate.

Q: What about torsion spring maintenance? What do I do if springs wear out?

A: Normally rubber torsion springs in a Bostrom seat should last the life of the seat. Their fatigue life is rigidly pre-tested, to far exceed average wear. However, certain conditions—such as undue stress from seat wobble, contact with oil or grease, excess heat and, rarely but occasionally reported, unidentified factors—will result in springs wearing out. Replacement springs are available in the parts department of your dealer or distributor from whom you purchased the seat, and also from the Bostrom factory.



Q: How important is driver weight adjustment?

A: Extremely important. Adjustment to the weight of the driver is essential for a good ride. Be sure the driver checks the adjustment before he sits down. He should ride with the seat suspended in mid-range—with the suspension mechanism deflected half way. If the seat isn't quite right for the driver's weight after he sits down, additional adjustment can then easily be made.

Q: What's the answer to topping and bottoming on rough roads or off the highway?

A: If your trucks are frequently used over extremely rough roads or operated off the highway, or if the seat is installed in heavy equipment such as dump trucks, concrete mixers, earth movers, etc., the addition of a Rough Usage Assembly is recommended. This assembly acts as a shock absorber to minimize topping and bottoming. A Rough Usage Assembly, of course, stabilizes the driver operating over rough roads—gives him efficient control of his equipment and a comfortable ride. Your truck dealer or Bostrom distributor has Rough Usage Assemblies, which can easily be installed by attaching them to torsion lever arms in the seat suspension system.

Q: Where is the best place to go for parts and service?

A: Go to the dealer or Bostrom distributor from whom you purchased your seats. If further information or attention is required, Bostrom stands by to help you.

Bostrom "Level-Ride" 80 Seats are available on any make of new truck. They may also be installed on any of your present trucks. See your truck dealer or Bostrom distributor.



BOSTROM CORPORATION

133 West Oregon Street . Milwaukee 4, Wisconsin

For genuine Black & Decker repairs check

For genuine Black & Decker repairs check Yellow Pages under "Tools-Electric" for address of nearby Black & Decker

FACTORY SERVICE BRANCH
Free tool inspection when requested • Genuine B&D parts used • Factory-trained technicians handle all work • Standard B&D
Guarantee at completion of recommended
repairs • Fast service at reasonable cost.

Or write for address of nearest of 48 branches to: THE BLACK & DECKER MFG. Co., Dept. S4601, Towson 4, Md.



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A FEW CHOICE
KEYSTONE DEALERSHIPS



Looking for a trailer line with more acceptance, fast turnover, greater profit? Then you want a Keystone "trailership". Every quality Keystone Trailer is individually custom-crafted with exclusive features to the customer's exact specifications and delivered in days, not months; livestock, pullmans, grain haulers, dry freight vans, open tops, reefers, or special vans. That's why Keystone Trailers are a consistent, year-round source of sales and profit to Keystone dealers. For full information without obligation,

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KEYSTONE TRAILER COMPANY

1503 Guinotte Ave. Kansas City, Mo.



CCJ

AT YOUR SERVICE

Continued from Page 24

Sixth, since LP gas is relatively clean burning, colder plugs can be used to increase electrode life. Usually the heat range should be one or two steps colder than recommended with gasoline. For example, an International gasoline engine using Champion J-8 would probably use the colder J-6 when burning LP gas. If plugs tend to foul, look for oil control troubles. It could be worn piston rings or leaking valve guides.

Seventh, because of higher compression

pressures, plus gaps can usually be set closer. A good rule when converting to higher compression ratios is to reduce gap spacing 0.001 in. for each 10 psi increase in cranking pressure.

Eighth, high compression ratios put greater stress on all components of the ignition system since higher sparking voltages are required. It is necessary to make more careful, if not more frequent, checks of the coil, condenser, distributor cap, points and ignition wiring.

Ninth, due to the high anti-knock valve of LP gas, basic ignition timing should usually be advanced 3 to 6 deg from the original settings specified for gasoline. However, automatic distributor advance should be modified to provide 10 to 20 per cent less spark advance at maximum speed. This modified advance "rule of thumb" has been found to apply well to almost any engine converted to LP gas.



"Five'll get you ten he starts that 'door latch stuck' gripe again."



Makes 2 non-stop runs Los Angeles to Chicago—with superior oil filtration—at a COST LESS THAN 4¢ PER 100 MILES

Only LUBER-FINER DIESELPAK, with its exclusive specially processed media, removes oil contaminants effectively—FAR LONGER THAN ANY SUBSTITUTE PACK.

DIESELPAK—designed expressly for use with H.D. detergent compounded oil—removes not only injurious suspended solids, but also colloidal impurities (often more destructive) without affecting the additives.

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- COSTS LESS than ineffective substitutes because it gives MORE MILES of effective filtration.
- Also Adds Thousands of Miles to Engine and Oil Life because its exclusive engineered protection Cleans Oil Faster and Keeps It Clean Longer.

STANDARD AND OPTIONAL EQUIPMENT—On leading Diesel Trucks, Tractors and Stationary Engines.

*A typical statement of many users, engineers, and original equipment manufacturers on file.



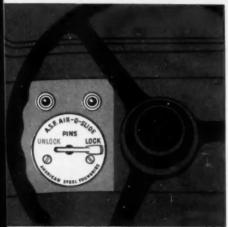
WRITE FOR INFORMATION -- how to get More Miles of effective lubrication at Less Cost. Dept. B-3.

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And now...

AIR-O-SLIDE



Adjust your weight, length...enhance trailer interchange... right from the tractor cab with the flip of an Air Control switch!

Here's something new...the ASF AIR-O-SLIDE...from the manufacturer of the industry's most widely accepted 5th wheel. Truckers have asked for a safe, dependable, adjustable mounting, and this is it.

The Air-O-Slide permits quick adjustment of weight distribution and tractor-trailer length, in 4" increments, up to 24". (Longer or shorter adjustments are optional.) No need to wrestle with manual

units in the rain or snow. Simply flip a switch on the dash...move tractor forward or backward as desired...signal lights show when pins are properly seated.

The ASF Air-O-Slide can be used with any tractor, and it's easy to install. Two types of mounting are available, U-bolts or angles. For complete specifications see your ASF Distributor or write directly to: American Steel Foundries, Hammond Division, Hammond, Indiana.

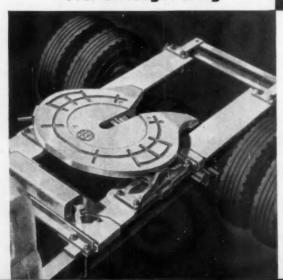
Close-coupled...for minimum over-all length of rig

The AIR-O-SLIDE
is built
to high quality
standards of

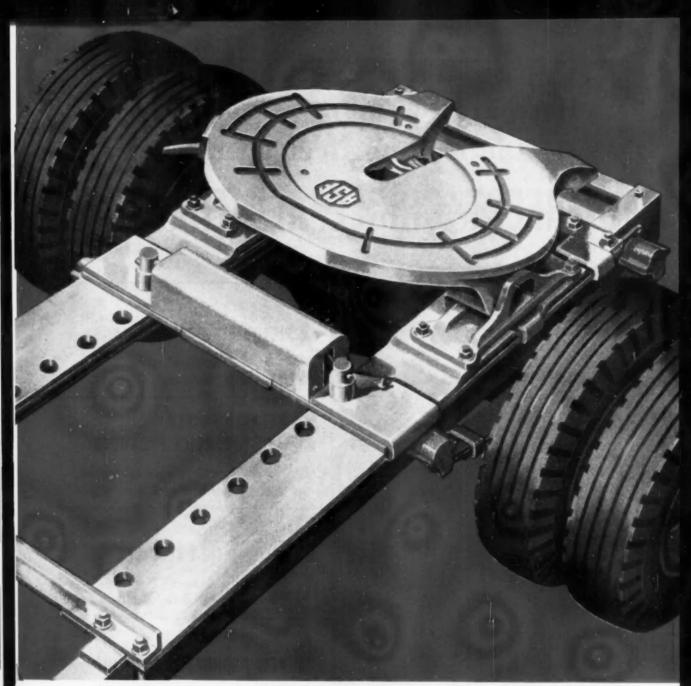


safety 5th wheels

A product of American Steel Foundries







Two 1½" diameter pins with ¾" bearing area provides greatly increased slack-free service

Percentage of load on rear and forward axles for various locations of 5th Wheel										
Distance 5th Wheel is	129° W. B.		132" W. B.		144" W. B.		157" W. B.		164" W. B.	
Forward of Rear Axle	Rear	Front								
4"	97.0	3.0	97.0	3.0	97.2	2.8	97.5	2.5	97.6	2.4
8"	93.9	6.1	94.0	6.0	94.4	5.6	94.9	5.1	95.1	4.9
12"	90.6	9.4	91.0	9.0	91.7	8.3	92.4	7.6	92.7	7.3
16"	87.6	12.4	87.9	12.1	88.9	11.1	89.8	10.2	90.2	9.8
20"	84.5	15.5	84.9	15.1	86.3	13.9	87.3	12.7	87.8	12.2
24"	81.5	18.5	81.9	18.1	83.3	16.7	84.7	15.3	85.4	14.6

Here are the main reasons why the leading fleet operators say

PERFECT CIRCLE ALL THE WAY!



PISTON RING PERFORMANCE

Dependable installations. Operating economy.

2 RELATED POWER SERVICE PRODUCTS

Simplify maintenance operations. Economically extend worn engine life.

3 INFORMATION SERVICES

Doctor of Motors Clinics. Specialized fleet technical assistance.

4 NEW PRODUCT LEADERSHIP

Major improvements in piston rings and power service products.

EXAMPLES:

Solid chrome plating on piston rings.

The much-imitated "98" Oil Ring.

The highly-successful new PC Valve Seal.

PERFECT

STON BINGS AND

CIRCLE

DOWER SERVICE BRODUCTS

Don Mills, Ontario, Canada

Hagerstown, Indiana

COMMERCIAL CAR JOURNAL, January, 1959



JANUARY 1959 FLEET HIGHLIGHTS AS REPORTED BY COMMERCIAL CAR JOURNAL

HIGHWAY TAXES get the "big eye" these days—in Congress, in state legislatures . . . and wherever highway users get together. It started in the fall when Federal Budget Bureau hung a "red ink" warning on the highway building program. Highway Trust Fund, it said, will be short almost \$1 billion by June next year . . . and another \$1 billion by June, 1961. Choice is "either increasing the gas tax (to a total federal tax of $4\frac{1}{2}$ to 5e a gal) or dipping into the government's general funds." Then the trouble started. Nobody, but nobody wants a tax increase (see page 5, this issue). Here's the press time box score . . .

AMERICAN TRUCKING ASSNS. . . . tax increase now would be "premature" . . . estimates of less income and more expense may be wrong . . . non-highway users who benefit by federal-aid highways "are making no contribution to their cost."

NATIONAL ASSN. OF MOTORBUS OPERATORS "vigorously" opposes fuel tax increases . . . highway users now pay "more than their fair share" . . . non-highway users benefit (national defense, postal service) but contribute "nothing."

AMERICAN AUTOMOBILE ASSN. . . . no user tax increases . . . Interstate Highway System is a part of national defense . . . some of its cost should come from Defense Dept.'s split of the federal budget.

NATIONAL GRANGE . . . "reaffirms its opposition to further increases in automotive excise taxes for any purpose whatsoever" . . . national defense benefits all . . . make-up Highway Trust Fund deficit from general funds.

AMERICAN FARM BUREAU FEDERATION . . . no gasoline tax boost . . . no excise tax boost . . . no appropriation from general funds . . . favors extension of time schedule for building Interstate System keep it on a "pay-as-we-go" basis.

AUTOMOBILE MANUFACTURERS ASSN.... continued opposition to "discriminatory excise taxes".... new highways "have a proper dependence on general tax receipts".... "strongly opposes" added federal taxes—"direct or indirect"—on motorists.

AMERICAN PETROLEUM INSTITUTE . . . "firm stand" against further federal gas tax increase . . . Interstate Highway System is "a basic requirement" in defense effort . . . and is of "direct benefit" to nation's economic growth . . . paying for it in part "from general tax revenues is equitable and proper."

ATA PRIVATE CARRIER CONFERENCE . . . private carriers at present "are paying more than their fare share" "every private carrier should watch with alarm."

DETROIT DISPATCH

ALTERNATOR MAKER. Leece-Neville, predicts they'll be standard equipment on all passenger cars by 1963.

130.000-LB GTW RIGS almost 100 ft long are being tried out on the Ohio Turnpike. Pike authorities think it might divert "piggy-back" traffic to the highway. Combination uses a tractor, two standard semi's and a converter dolly. Denver-Chicago and five other fleets are involved in the tests. Massachusetts Turnpike also is reported willing to give the "giants" a try.

BI-METALIC BRAKE drum interest grows. Buick's using them on front wheels of '59 models, Pontiac on its '59 police cars. Latest development is announcement from Kelsey-Hayes. It has signed agreement with Fairchild Engine and Airplane Corp. (Al-Fin patent holder), will produce them "for original equipment use on passenger cars of the 'Big Three'."

HORSEPOWER requirements will go up as more miles of the Interstate System's superhighways are completed . . . as high as 500 hp, predicts Cummins Engine Manager of Distribution W. D. Blizzard. His reasons: (1) More weight to pull as a result of liberalized weight laws, (2) Trend to larger trailers with increased wind resistance, (3) Higher speeds. It takes 40 per cent more hp for an average speed of 55 mph than for 45 mph.

EMERGENCY BRAKE study by Interstate Commerce Commission and Bureau of Public Roads is expected to come out of the laboratory and onto the highway this summer. Most of testing is to be done at Jennerstown, Pa.

P. O. PETERSON, board chairman and president of Mack Trucks resigned end of last month. Reason: More time for personal business. No successor had been named up to press time.

WASHINGTON WATCH

MORE SAFETY REG changes were proposed last month. ICC wants to add two new paragraphs to Sec. 193.60 on cab visibility. One defines limit of windshield cracks. The other limits windshield and window stickers to one state or municipal inspection sticker—no larger than 3 x 5 in.—on driver's side of cab.

OUT OF SERVICE go drivers who exceed maximum hours of service if another proposed change to Safety Regs is adopted. Rule would apply except when weather "imperils" safety of driver or vehicle. Present Sections 195.10 and 195.11 would be eliminated and a new Section 195.11 added plus amendment to 195.12.

YOU HAVE UNTIL March 15, 1959, to comment or protest these proposals. Put it in writing—original and 14 copies, mail it to Secretary, Interstate Commerce Commission, Washington 25, D. C.

ROBERT J. MCBRIDE resigned as Executive Director of ATA'S Regular Common Carrier Conference as of the first of this month. He's been with the Conference 21 years . . . will continue to serve it as a consultant.

FUEL TAX CREDIT or refund is due on diesel fuel used to power separate engine mounted on truck for operation of special equipment . . . whether or not fuel comes from vehicle's supply tank or from separate fuel tank, says Internal Revenue Service Ruling 58-575. It does not apply where equipment is operated with a power take-off from vehicle's engine.

TRUCK BODY KITS ARE subject to same excise tax as on complete truck bodies, says Internal Revenue Service Ruling 58-582. Adds the ruling, the fleet operator who buys such a kit, buys other parts needed and erects the body must pay the tax on (1) the added parts plus (2) his production cost plus (3) 10 per cent.

ATA FOUNDATION CONTINUES to get supplier support. Midland-Ross Corp.'s \$10,000 grant will be used to sponsor a series of trucking promotion ads in Fortune magazine. Highway Trailer Co.'s \$7500 grant goes for a special ad campaign reminding opinion leaders of the truck's essential services. Dodge Truck's 10th annual renewal of its support includes several projects—including industry promotion on the Lawrence Welk TV show.

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LONGER TRAILERS? Apparently New Jersey operators aren't interested . . . at least at present. New Jersey Motor Truck Assn. asked its members if trailer length should be increased from the present 35-ft maximum. Answers came from 200 carriers—130 Jersey-based, 70 out-of-state. They were so divided, the Association tabled them for further study.

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ANSWERS WERE summarized like this: Would longer trailers be beneficial to you? Yes—46 per cent, No—51 per cent. Should present 35-ft limit be retained? Yes—44.5 per cent, No.—43.5 per cent. Would an increase be harmful? Yes—17 per cent, No—76 per cent. Would you be compelled to buy new equipment? Yes—21 per cent, No—71 per cent. Out of 104 carriers, 38 per cent wanted to keep the 50-ft combination limit but have no trailer length limit. The rest wanted a longer trailer, most favoring a 40-ft limit.

W. Y. "BEN" BLANNING has retired as director of ICC's Bureau of Motor Carriers, having served as its head since 1937. New director is former assistant director Herbert Qualls. He's been with the Bureau of Motor Carriers 22 years, comes from Tennessee, is an Army Reserve Brigadier General as head of the 435th Transportation Highway Transport Command reserve unit.

FLEET TRAINING courses offered by colleges throughout the country and sponsored by National Committee for Motor Fleet Supervisor Training in 1958 were attended by 1435 fleet supervisors.

1958 PUBLIC RELATIONS CONTEST sponsored by Great Dane Trailers through the ATA Foundation is looking for entries. For an idea of what could win one of the three \$1000 top prizes—or other awards, see page 68, May '58 issue. Deadline is Feb. 28, 1959. Get rules and details from ATA Foundation, 1424 Sixteenth St., N.W., Washington 6, D.C.

BUREAU OF MOTOR Carriers has a new Section of Field Service. It's job, as the name implies, will be to head up ICC motor carrier field staff.

TRUCK TONNAGE

october intercity truck tonnage was up 3.2 per cent over October, 1957, reports ATA's Research Dept. October boost puts the 10-month total for '58 down only 3.3 per cent from tonnage carried during first 10 months of 1957. Six of the nine geographical regions showed gains in October, 1958, as compared with October, 1957. New England and Northwestern were up most—12.1 and 11.6 per cent respectively. Other gainers

Month	Change from Previous Month	Change from a Year Age
October, 1958	+11.3	+ 3.2
September, 1958 August, 1958 July, 1958	+ 0.2 - 2.4	+ 2.3 - 6.8 - 0.3
2nd Quarter '58		- 2.6
June, 1958 May, 1958 April, 1958	+ 3.2 + 2.6 + 1.9	+ 5.3 - 5.8 - 5.4
1st Quarter '58	W-1-1	-15.6
March, 1958 February, 1958 January, 1958	+ 6.6 - 8.5 + 9.3	- 7.6 - 8.1 - 5.3
4th Quarter '57		+ 0.9
December, 1957 November, 1957	-10.2 -14.4	+ 0.2 - 4.8
3rd Quarter '57		+ 6.5

were Southern—up 7.5 per cent, Midwestern—up 7.4, Southwestern—6.9, and Middle Atlantic—6.6. ATA's tonnage data comes from a special monthly survey of about one-third of all ICC Class I and II general freight carriers.

TRUCK AND BUS PRODUCTION

	Weeks	Ending	Year to Date			
Make	Dec. 13	Dec. 6	1958	1957		
Chevrolet. G. M. C. Diamond T Divoc Dodge and Farge Ford Fr. W. D. International Mack Studebaker White Willys. Other Trucks	8,972 1,604 160 70 1,824 6,406 13 290 337 422 2,607 60	8,460 1,790 135 70 1,850 7,094 9 252 284 419 2,141 60	257,745 58,009 5,556 2,814 55,252 229,791 1,160 79,914 13,415 9,863 16,530 87,675 2,780	330,108 66,563 5,564 2,727 74,897 324,694 1,000 116,733 16,521 13,215 18,054 72,201 4,010		
Total—Trucks	22,855 35	22,564 40	820,484 2,882	1,065,307 3,745		
Total Trucks and Buses	22,890	22,604	823,386	1.059.052		

Source: Automobile Manufacturers Association

IN THIS ISSUE

... but don't overlook

How West Bros. TOP MANAGEMENT cut ACCIDENTS	78
New V-6 and V-8 DIESEL engines from GM	80
How to READ SPARK PLUGS to locate trouble	82
What Montreal's largest BUS REBUILD SHOP has	90



has the makings of a good year . . . both for truck fleets and for their suppliers. Here's why. Most industries are basing their plans on increasing business. The more goods the country produces, the more tonnage there is to be transported. And truck fleets have shown an ability to get a good chunk of it . . . plus a little bit more each year. For example, Ed Kiley, ATA Research Dept. director, says trucks tote presently almost one-fifth of total intercity tonmiles. By 1965, he predicts, the truck bite will be 23 per cent.

PRIVATE CARRIERS—presently operating about 85 per cent of all trucks—hinge their expectations directly on the business they're in. Some will do better than others. Many will be able to take advantage of "Plan 3" piggy-back where the shipper uses his own trailer, pays regular freight rate but collects rental while his van is in rail hands.

FOR-HIRE CARRIERS saw their 1958 third quarter tonnage come within 2.2 per cent of 1957's third quarter . . . despite a 6-week western state work stoppage. After experiencing a 5.6 per cent first quarter drop, this was good news.

PROFIT PICTURE for for-hire carriers isn't as good. When you have a high operating ratio, a drop in revenue takes its "lumps" mostly out of the net. ATA says profits for the first six months of '58 were down by half as compared to 1957's first half. Encouraging note is that they've been picking-up since.

RAILROAD COMPETITION is going to be tough. Rails are aggressively going after freight... with three varieties of piggy-back... and a new approach to agreed charges. Trial tariffs are before ICC now. Idea is to offer a lower than normal rate if shipper guarantees to move by rail a certain percentage of his annual traffic volume. Savings of 15 to 25 per cent are spoken of. Since it's based on a percentage—and not a fixed number of tons, it could apply to all shippers—large and small. Rail advantage could be offset by for-hire motor carriers getting an OK on similar rates. One benefit: Greater stability in equipment requirements.

STATE REGISTRATION AND highway use tax laws are being looked into by a special U. S. Chamber of Commerce subcommittee. Aim is to promote uniformity among state highway laws by encouraging states to work together to amend present statutes, U. S. C. of C. fears federal intervention if there is not better coordination.

PRODUCTION CHART (below) for first 10 months of '58 shows a sharp lead in replacement tire shipments over '57 coupled with a drop in original equipment totals. You might deduce that fleet operators are putting more miles on older trucks . . . postponing normal replacement. It could make '59 a good truck year.

In thousands			Truck Factory Sales - Domestic		Truck Trailer Shipments				Truck and Bus Tires							
of units, except bus sales are in actual							Bus Factory Sales Domestic		Replac	ement nents	Original Equip. Shipments		Inven-			
numbers	October	10 Months	October	10 Months	October	10 Months	October	10 Months	October	10 Months	October	10 Months	tory End of Octobe			
1958	87.1	600.6	55.9	533.8	5.3	41.3	149	2391	1106.4	7823.3	316.1	2706.9	2778.7			
1957	76.9	734.0	73.7	740.4	5.0	51.8	232	2851	950.8	7481.2	321.7	3472.4	2986.8			

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ver had a hankerin' for a nap-on set like this?

Call it pride . . . call it "feel" for really good tools ... call it anything you like - but deep down in the heart of every real mechanic there's a hankerin' for a tool layout like this.

When you've got a rush job - and the tool you need most isn't in your collection - that's when it hits you. That's when you whack the bench and say, "Some day I'm gonna have a boxful!"

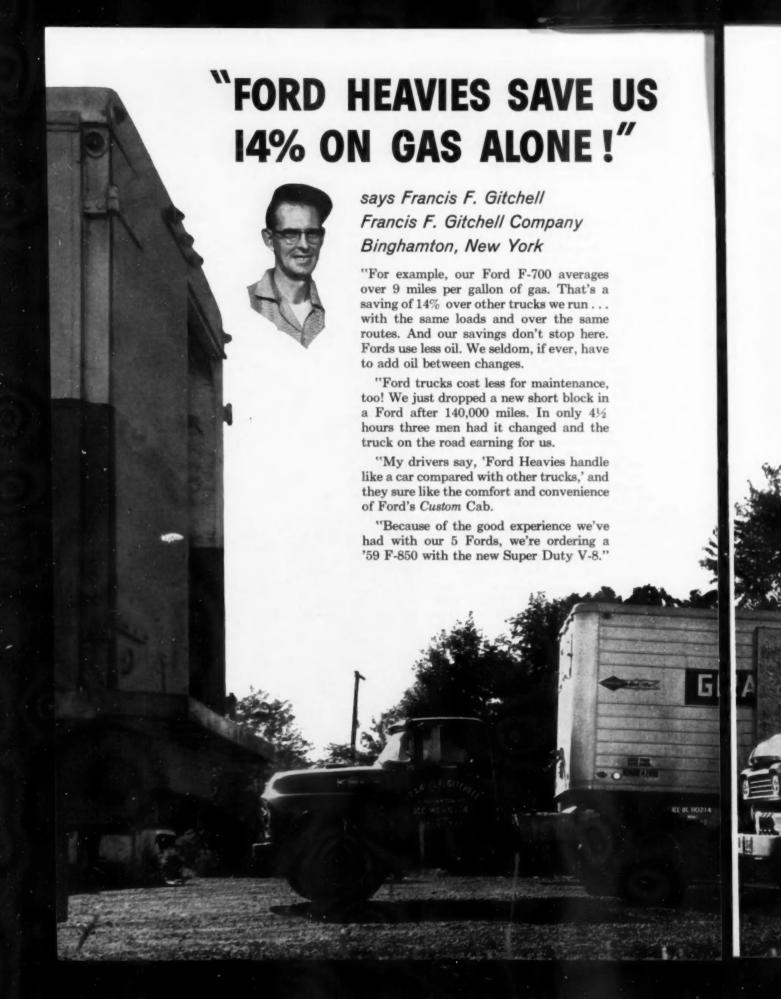
Well, sir, that "some day" is here. Snap-on will roll this handsome chestful right into your shop - tomorrow - on an easy payment plan that will fit your budget.

And it isn't just pride - or feel. This big Snap-on tool layout is a solid income booster for the individual mechanic, repair shop, or service station operator who really wants to make money in the repair business. The extra money is in the speed with which you turn out jobs. Speed comes from both tool selection and quality. You get both in this Snap-on set.

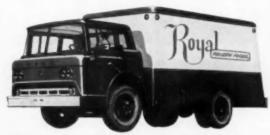
1/4-in. drive Socket Set. 19 tools 3/4-in. drive Socket Set, 45 tools 1/2-in drive Socket Set, 38 tools Combination Wrenches, 14-in. to 11/4-in. Half Moon Boxockets,® 1/4-in. to 3/4-in. Dwarf Boxockets. %-in. to 1%-in. Ignition Wrenches, 13/4-in. to 3/4-in. Tappet Wrenches, 16-in. to 1/6-in. Hex Head Wrenches, 1/4-in. to 3/4-in. Pliers Set, 7 tools Standard Screwdrivers, 13 tools Phillips Screwdrivers. 5 tools Chisels and Punches. 17 tools Torgometer, 150 ft-lb Soldering Gun Hack Saw Frame, 10-in. - 12-in.

Junior Hack Saw and 12 Blades Tinners Snips, 3-in. Blades Hammer Head Screwdriver Vise-Grip Wrench Wire Brush 8-ft Steel Tape Rule 4-oz Ball Peen Hammer 12-oz Ball Peen Hammer 2-lb Ball Peen Hammer 1-lb Plastic Tip Hammer Set of Brake Cyl. Clamps Brake Shoe Spring Compr. **Brake Adjusting Tool Electric Circuit Tester Brake Spring Plier** Spark Plua Gauge Feeler Gauge Valve Adjusting Tool Valve Key Replacer Valve Spring Compressor Valve Lifter Ring Groove Tool Piston Ring Compressor Pry Bar Carbon Scraper Ratcheting Boxocket,

1/2-in. and %4-in. This money-making set can be yours on easy payments. Ask A T I O N Kenosha, Wisconsin your Snap-on man for details.



Go FORD WARD for savings with '59 Ford Trucks!



Whatever your job . . . wherever you do it—you'll find Ford Heavies and Extra Heavies are engineered and built to do it better! Whether your job calls for conventional models, like the

Gitchell Co. tractors, or a C-550 Tilt Cab truck as shown here . . . you'll be *ahead* with a Ford. And the '59 improvements in these models will bring still more benefits to your operation.

Greater operating economy with new, faster rear axle ratios and wider choice of transmissions.

More efficient parking brake of the internal expanding type has approximately 50% greater stopping and holding ability, requires less than half the operating effort needed for the previously used type.

Increased payloads and longer axle life with new, higher-capacity front and rear axle options.

Factory installed tractor package customfitted to Ford trucks for safer, more dependable braking.

Yes, the new '59 Ford trucks are here to take you Ford-ward for savings, Ford-ward for modern style and stamina. See your Ford Dealer today!

FORD TRUCKS COST LESS



More Profit with Ideal System



Sample entries show how to keep this simple record.

Designed Especially for TRUCKERS

You'll see where to cut costs, where your best profit opportunities are, when you keep your business and tax records in this easy "do-it-yourself" book. No bookkeeping experience needed. Especially designed for and used by thousands of truckers. From America's largest publisher of simplified bookkeeping systems. Recommended by bankers and accountants. Order from your stationer, \$3.50 and up. If he doesn't stock, write for full information to The IDEAL SYSTEM COMPANY, 2437 West Pico Boulevard, Los Angeles 6, California.

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ENGINE AIR FILTER SERVICE INDICATOR

> MECHANICALLY-OPERATED REQUIRES NO ELECTRICITY SAFETY ENGINEERED

Tested by leading Engine Manufacturers

VIVID RED SIGNAL

ACTUATED DIRECTLY by pressure drop across air cleaner
RISES GRADUALLY to warn
when filter is approaching

efficiency limit
LOCKS IN FULL VIEW when
filter requires servicing

No other like it! Operates in any position; can be mounted directly on air cleaner, at intake manifold or dashboard. Designed for all dry-type and oil-bath air cleaners on Diesel, gasoline or gas engines Simple, tamper-proof, unfailing, inexpensive.

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RUSH details on Engine Air Filter Service Indicator

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DATES and DOINGS

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JANUARY

- 12-16—Society of Automotive Engineers, Annual Meeting and Engineering Display. The Sheraton-Cadillac and Hotel Statler, Detroit, Mich.
- 15-17-New Mexico Motor Carriers Assn., Annual Convention, Hilton Hotel, Albuquerque, N. M.
- 16—New England and Middle Atlantic Accounting Councils, American Trucking Assas., Regional Meeting, Hotel New Yorker, New York City.
- 17-25—Chicago Automobile Trade Assn., Annual Automobile and Truck Show, International Amphitheatre, Chicago, Ill.
- 19-22—American Road Builders Assn., Annual Convention and Exhibit, Dallas Memorial Auditorium, Dallas, Tex.
- 20-21—National Tank Truck Carriers Conference, American Trucking Assns., Board of Directors and Commissioners Meeting, Statler Hotel, Washington, D. C.
- 21-22—Executive Committee, American Trucking Assns., Regular Meeting, ATA Building, Washington, D. C.
- 25-28-Truck Trailer Manufacturers Assn., 18th Annual Convention, Hollywood Beach Hotel, Hollywood, Fla.
- 25-29-California Trucking Assn., Annual Meeting, Coronado Hotel, San Diego, Cal.
- 29-30-Private Truck Council of America, Annual Convention, Sherman Hotel, Chicago, Ill.

FEBRUARY

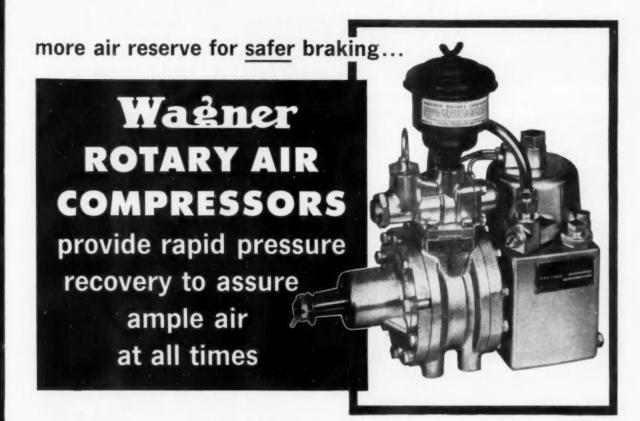
- 2-5—National Automotive Accessories Mfgs. of America, Exposition, Coliseum, New York, N. Y.
- 11-13—Regular Common Carrier Conference, American Trucking Assns., Meeting, Statler-Hilton Hotel, Dallas, Tex.
- 15-17-Motor and Equipment Wholesalers Assn., National Convention, Conrad Hilton Hotel, Chicago, Ill.
- 15-17—National Standard Parts Assn., National Convention, Sherman Hotel, Chicago, III.
- 15-19-Industrial Relations Committee, American Trucking Assns., Meetings and Discussions, Roney Plaza, Miami Beach, Fla.
- 18-21—Automotive Service Industry Show, Sponsored by MEWA, NSPA and MEMA, Navy Pier, Chicago, Ill.
- 19-21-Louisiana Motor Truck Assn., Annual Convention, Jung Hotel, New Orleans, La.
- 27-March 8-1959 World Wide Auto Show, Miami Beach Exhibition Hall, Miami Beach, Pla.

MARCH

- 3-5-American Transit Assn., Regional Conference, Hotel Statler, Washington, D. C.
- 11-14—Common Carrier Conference—Irregular Route, American Trucking Assns., Meeting, Roosevelt Hotel, New Orleans, La.
- 12-15—Pacific Automotive Show, New Brooks Hall, Civic Auditorium, San Francisco, Cal.
- 16-18-Society of Automotive Engineers, National Passenger Car, Body and Materials Meeting, Sheraton-Cadillac Hotel, Detroit, Mich.

APRIL

- 6-10—American Gas Asen., Edison Electric Institute, Joint Motor Vehicle Committee Meeting, Netherland-Hilton Hotel, Cincinnati, Ohio.
- 7-9—American Welding Society, Welding Show, International Amphitheatre, Chicago, Ill.
- 21-23-American Transit Assn., Regional Conference, Hotel Chase, St. Louis, Mo.
- 26-30—Operations Council, American Trucking Assns., Annual Spring Meeting, Leamington Hotel, Minneapolis, Minn.



Wagner Rotary Air Compressors have what it takes to deliver a constant and smooth flowing supply of compressed air at all times. Their ability to provide rapid pressure recovery means safer stopping power even under the most severe braking conditions.

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Rotary compression forces all air from the compression chamber. Oil and air are separated and cooled before air is discharged to prevent carbon formation in air lines. All rotating parts are turned by the rotor shaft which is suspended on two bearing surfaces to lower friction loss. Uniform torque load with moderate stresses assures smooth, quiet operation with long belt life even at high compressor speeds. Field tests and fleet records show that Wagner Rotary Air Compressors help keep air brake maintenance costs down. Their exceptionally long service life and easy, infrequent preventive maintenance adds up to greater economy...greater performance...greater safety. Available in either 9 C.F.M. capacity, air or water cooled; or 12 C.F.M. capacity, water cooled.

For full information about these compressors and details on complete Wagner Air Brake Systems and Equipment for trucks, trailers, tractors, buses and off-the-road equipment, send for your free copy of Wagner Catalog KU-201.

Remember, when ordering new equipment, be sure to specify Wagner Air Brakes.

WK59-2



LOCKHEED HYDRAULIC BRAKE PARTS, FLUID and BRAKE LINING . AIR HORMS . AIR BRAKES . TACHOGRAPHS . ELECTRIC MOTORS . TRANSFORMERS . INDUSTRIAL BRAKES

ENGINEER'S FIELD REPORT

PRODUCT RPM MULTI-SERVICE
GEAR LUBRICANT

YAKIMA CEMENT PRODUCTS CO. FIRM Yakima, Washington

No scoring or pitting of differential gears in 6 years



In Six Years of using RPM Multi-Service Gear Lubricant, not one differential in the entire 20-truck fleet of Yakima Cement Products Co. has shown any scoring or pitting of gear teeth. Despite grueling sorvice delivering ready-mix concrete and other

building materials to off-highway construction sites, lubricant has never failed to do its job. Firm's six-wheel-drive trucks supply sand, gravel, ready-mix concrete, and fabricated concrete products to projects within 100 miles of Yakima, Washington.



Ready-Mix Truck like rest of firm's vehicles, is rebuilt Army surplus $2\frac{1}{2}$ —3 ton International. "In the fleet of 21 six-wheel-drive trucks, we have never had a transmission or differential failure due to lubrication, despite our severe operating conditions since

we started using RPM Multi-Service Gear Lubricant," says firm's chief mechanic, Art Weber. This lubricant is also used in all mixer drive gear boxes.



TRADEMARK "RPM DELO" AND DESIGN REG. W. S. PAT, DFF.

STANDARD OIL COMPANY OF CALIFORNIA, San Francisco 20
THE CALIFORNIA OIL COMPANY, Perth Amboy, New Jersey

Why RPM Multi-Service Gear Lubricant Prevents wear



●Special compound forms protective lubricating coating on gears by chemical reaction with metal...resists rubbing action of hypoid gear teeth.

 Withstands extreme temperatures and pressures...highly oxidation resistant...keeps bearings and gears cool.

•Inhibitors resist rusting, stop foaming...lubricates integral bearings...will not separate.

For More Information or field help with any fuel or lubrication problem, contact representative of any company listed or write direct.

STANDARD OIL COMPANY OF TEXAS, El Paso The California Company, Denver 1, Colorado

COMMERCIAL CAR JOURNAL, January, 1959

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P (Mg. per sq. cm. surface)

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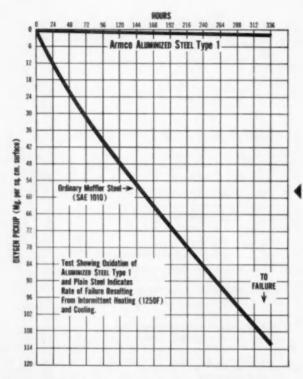
Burnin indica ALUMI muffle

Сом

How Armco ALUMINIZED STEEL Beats Muffler "Burn-Out"

Iron-aluminum alloy layer protects metal from effects of heat

High heat literally "burns out" mufflers made of ordinary low carbon steel. But Armco Aluminized Steel withstands muffler operating temperatures because a tight heatresistant alloy layer forms on the surface of this special hot-dip aluminum-coated steel.



Burning is oxidation. The rate at which a muffler metal picks up oxygen indicates how fast it will fail. The graph readily shows that Armco ALUMINIZED STEEL resists oxidation at high temperatures, while ordinary muffler steel moves rapidly toward failure.



Here's evidence

Road and laboratory tests provide strong evidence of the extra life of mufflers made from Armco Aluminized Steel, For example, in the test on which the graph is based, samples of ordinary low carbon steel and Armco Aluminized Steel were heated to 1250 F, and cooled intermittently, to approach conditions in hard-working truck mufflers. The results are convincing.

Actual service records give solid evidence, too. One fleet reports that mufflers of Aluminized Steel on 140 diesel tractors averaged more than four times the life of carbon steel mufflers previously used.

If you would like to know where to get long-lasting mufflers made of this special heat-resisting steel, just write Armco Steel Corporation, 1099 Curtis Street, Middletown, Ohio.

ARMCO STEEL



bny

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Armco Division • Sheffield Division • The National Supply Company • Armco Drainage & Metal Products, Inc. • The Armco International Corporation • Union Wire Rope Corporation • Southwest Steel Products

"Dig" or Be Dug

There's this real hip character, see. He digs Diz, and Bird, and knows that MJQ does not stand for the name of a foreign sports car. This Cat is really with it . . . Up to here!

We were up in his pad the other pm, digging his hi-fi, when one of the Cats started moaning. "Man," he said, "these safe driving campaigns are a real drag. All these figures about the Squares getting killed, or winding up in Etherville, really put me down. Like, nothing! I mean, well, so who cares if Welk loses a few fans? Dig?"

"Cool it man!" said Big Daddy-o, who then took a chorus. Like so:

"Swinging down the stem in the old Pushmobile 6 is like jamming for kicks with a bunch of the Cats. Either you watch the tempo and dig what they're doing, or the whole bit's like something out of Lombardoland. And if you goof . . . Wild! A goof on the stem can put you back in your pad, but sore, man. I mean, like Ouch! You can even quit the scene for good. And when the Leader drops your option, that's The End. So here's the word, man. When a Square talks safety, dig or be dug. Dig or Be Dug!"



English Spoken Here

In case you're unfamiliar with the language used in the column at left, here is a rough translation:

This is about a very wise jazz fan. He understands and likes the music of Dizzy Gillespie and Charley Parker. He knows that MJQ is the Modern Jazz Quartet. He is very wise indeed.

We were at his home the other night, listening to jazz records, when one of our group said, in a critical tone of voice: "I don't think much of the current safety campaigns. The figures about people being killed and injured depress me. But I'm not impressed. I don't really care what happens to these or other people. What do you think?

"Shaddup, already" said our host, who then had this to say:

"Driving your car is like playing jazz with a group of other musicians. You have to watch your speed and pay attention to what other drivers are doing, or chaos will result. And if you make a mistake, you can be in for real trouble. You may be seriously injured and have to stay at home for a long and painful time. You may even die. And when God says your time is up, there is no argument. So take this advice, when you hear a safety message, pay attention, or you may not be around to hear another one. Pay Attention, Or Else."

COMMERCIAL CAR JOURNAL, January, 1959

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POST

Seat 3 to 4 times faster than any other chrome rings!

BEVELED CHROME-VENT

- IMMEDIATE OIL CONTROL
- NO MORE COME-BACKS

Want faster seating ring jobs? Want oil control in tapered, out-of-round or re-bored cylinders? Then you need Hastings Chrome-Vent oil rings. They seat 3 to 4 times faster than any other chrome rings made. They assure positive oil control right now-and for the life of the job.

The Hastings patented beveled chrome rail makes immediate fineline contact with the cylinder wall. It has less contact area to wear-in-takes less time to break-in.

Chrome-Vent gives at least 3 times greater chrome wearing surface, too-because the thick chrome cap extends around the bevel. And, with the lighter inner-spring made possible by the beveled design, it makes gentle, soft-pressure contact with any cylinder wall.

On your next ring job, call for Hastings-the product of replacement specialists-and be sure of good, trouble-free performance.

HASTINGS MANUFACTURING CO. . HASTINGS, MICHIGAN Hastings Ltd., Toronto

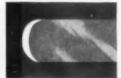
Piston Rings, Oil Filters, Casite, Spark Plugs

Hastings Rings are covered by U. S. Patent Nos. 2148997, 2511874, 2565042, 2712971



BEVELED CHROME-VENT

Rails make fineline contact with cylinder wall for a faster seat. Less area to wear-in means less time to break-in.



CONVENTIONAL CHROME RAIL

Originated by Hastings ... now replaced by Hastings exclusive Beveled Chrome.

PISTON RINGS

TOUGH on oil-pumping

GENTLE

on cylinder walls



LUBE LOGIC SIX Sure-money

PARKING

STORE FUEL UNDER

THE LOT NEXT DOOR

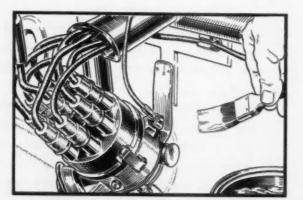
Lack of space for underground tanks was cutting off a midwest fleet operator from the advantages of bulk fuel storage. There just wasn't room on his own real estate to sink tanks. He and his TAE* were kicking the problem around when they both happened to notice the lot next door . . . a parking lot. The solution to the problem hit them both at the same instant. No time was lost. They cornered the parking lot owner, sold him a deal, made him the first parking lot operator to collect parking fees for a space six feet under.

Excavation was timed for a slack period. What losses the lot did incur were negotiated. It didn't amount to much. Tanks were sunk and black top replaced. Even the space lines were repainted. Now the parking lot gets a parking fee from two spaces . . . and the fleet operator has all the bulk storage he needs. Take a tip if you've got a similar problem . . . and get friendly with your neighbors.



END DOLLY DRUDGERY

Do cold mornings bring on a rash of sore sacroiliacs and delayed departures in your dock? Chances are dolly drudgery is doing it. Old-fashioned liniment won't cure it . . . neither will an old-fashioned grease. But TAEs*, all over the country, are cutting hours off hitch-up time with an answer that costs less than the price of a light lunch. Call vours and see.



WATERPROOFED IGNITION **MAKES STARTING EASIER**

Are your batteries showing the strain of a heavy foot on the starter on damp days? Get your TAE* to show you how to waterproof ignitions with Texaco Rustproof L. It's a simple, five minute job that pays off with months of faster starts.

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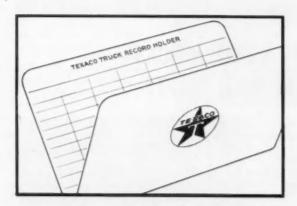
"SLEEPERS" you may be missing!



m xt nit

CORRODED SOCKETS SOLVED

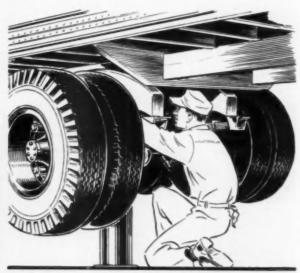
If corroded sockets force you to change taillight bulbs with a light mallet and a pair of duck-nosed pliers, listen to this: put a drop or two of Texaco Rustproof L on the base when you install a new bulb. It will come out as easy as a highway patrolman's summons book . . . even after six months. The cleaner contacts you get might double bulb life, too.



TRUCK RECORD FOLDER

A sturdy manila folder has been designed to help you record vital facts on mileage, oil changes, lubrications, tire life, batteries, etc. Tell your local Texaco representative how many you need; or, write direct.

TUNE IN ... Metropolitan Opera Radio Broadcasts Every Saturday Afternoon



WHY SLIDING TANDEMS STICK

We'll probably get some arguments on this one, but the theory has proved successful too many times to be wrong. It's not cold weather and stiffened greases that cause sliding tandems to stick. It's corrosion from mud and slush and sleet. Last winter, a lot of doubtful operators paid for the doughnuts and coffee when TAEs* bet them that Texaco Rustproof L would solve this problem. If you're in the mood for a little friendly argument, challenge your local TAE on this.



*TEXACO AUTOMOTIVE ENGINEERS

Every month we'll bring you a batch of "sleepers," little angles, so easy to overlook, where big savings in money and time can be made. But month in and month out, your local TAE is the best source of money-saving lubrication ideas. Don't forget that "Lubrication is a major factor in cost control." The Texas Company, 135 East 42nd Street, New York 17, N. Y., Dept. CCJ-10.



BEWARE OF "BARGAIN" BRAKE BLOCKS— YOU CAN'T BARGAIN WITH SAFETY

Replacement brake block economies made available by a reputable manufacturer who has developed better fabricating methods or materials are one thing. Such economies are fine—because everybody benefits. The company sells more blocks. The trucker gets a better product for the same money—or the same product for less money.

NOT THE SAME. But inferior grade brake blocks now on the replacement market are another thing entirely. Turned out by hit-and-miss methods from below-par materials, these blocks benefit nobody. The trucker finds them a poor "bargain", for they quickly

lose their stopping power and need replacement. Worse—because of their inferior performance—they can lead to disastrous accidents.

YET LOOK ALIKE. Unfortunately, the inferior blocks *look* so much like the top quality stuff that only a brake lining engineering expert can tell them apart. Consequently, some truckers are being fooled into buying the inferior blocks under the impression that they're getting a first-class product. What protection do *you* have against falling into this same trap yourself?

BEST SAFEGUARD. Surest way to steer clear of getting stuck with a "junk" block is to buy only "name brand" brake blocks—made by Bendix or some other reputable manufac-

In determining the relative merits of the different replacement block brands, be guided by this fact about original equipment blocks. Automobile and truck manufacturers go to great lengths to protect their customers by installing only brake lining made by responsible people. And, because Bendix has so satisfied vehicle manufacturers, our linings are on more new vehicles than any other brand.

COMMERCIAL CAR JOURNAL, January, 1959

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NOTHING Eclipse v of brake this one of our kind of

used in brake machine bare by tions ratelypes a

It takes more than a bucket and a kitchen stove to manufacture quality brake blocks



NOTHING IS LEFT TO CHANCE at Bendix-Eclipse when it comes to thorough testing of brake blocks. Special test trucks like this one measure braking characteristics of our blocks under every conceivable kind of operating condition.

ONE EXAMPLE of the precision equipment used in manufacturing Bandix-Eclipse brake blocks is a battery of special machine tools which drill and counter-here block hales to the exact specifications required for perfect fits on various

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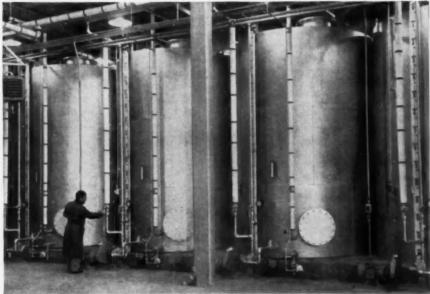
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1959



AT BENDIX-ECLIPSE® brake blocks are formed in single and double were molds under tons of pressure and rigidly controlled temperatures. Result: a uniform, dense, strong, and tough friction material.



LARGE QUANTITIES of special Bendix-menufactured resins are kept in these special storage tanks ready for use in Bendix-Eclipse brake linings and for sale to other industries.

*TRADEMARK



BENDIX-ECLIPSE

Marshall-Eclipse Division

Troy, New York



COMMERCIAL CAR JOURNAL, January, 1959

Laugh it off

Reefer Driver: "My wife has a terribly funny obsession. She is scared to death that someone will steal her clothes."

Tanker Driver: "Doesen't she have them insured under the new comprehensive home owner's policy?

Reefer Driver: "Yes, we do, but that doesn't lessen her fear. She has someone stay in the closet and watch them. I found him in there the other night."

001

FREIGHT CLAIM STENO: "LAST NIGHT MY BOY FRIEND LOOKED INTO MY EYES AND TOLD ME HE WAS ABOUT TO MARRY THE MOST WONDERFUL GIRL IN THE WORLD."

MAINTENANCE STENO: "TOO BAD, AND TO THINK YOU TWO HAVE BEEN ENGAGED FOR TWO YEARS."

ccs

Freight Traffic Manager: "How did you enjoy your Florida vacation?"

Freight Claim Agent: "I enjoyed the rest. Everything was fine except it rained continuously almost every day."

Freight Traffic Manager: "You must be exaggerating. How do you account for your magnificient suntan?"

Freight Claim Agent: "Suntan nothing! That's rust."

003

Wealthy Fleet Operator: "Jarvis, why didn't you lay out my gloves for me tonight?"

Butler: "But, sir, you told me you were calling on a young lady tonight and I thought you'd feel better without them."

007

WEAVIN' WILLIE SAYS: "THE ONLY THING THAT GOES AS FAR AS IT DID TEN YEARS AGO IS THE DIME THAT ROLLS UNDER THE BED." Diesel Mechanic: "Every time I hit the boss for a raise, he keeps saying, 'We'll see about it.' But you know, he never takes any action. I don't like his do-nothing attitude."

Shop Parts Clerk: "Yeah, but his daughter is the exact opposite. With her it's strictly nothin' doing."

cos

Maintenance File Clerk: "For the life of me, Minnie, I can't see why you keep refusing to date Charlie, again. The boss says he has a great future in the parts room and he seems such a nice boy, too."

Maintenance Stenographer: "Well, I'll tell you why I won't date him again. He's the sort of boy who spends a dollar on you for the picture show, then spends the rest of the evening trying to squeeze it out of you."

Tipsy Truck Mechanic: "Shay, Frank, watsh Sam's last name?"

Ditto Truck Mechanic: "Sam who?"

"Cici Jay"



"What is it this time?"

BACHELOR TRUCK MECHANIC: "I HAVE PICTURES OF MARILYN MONROE, JAYNE MANSFIELD, AND BRIGITTE BAR-DOT PASTED ALL OVER MY BEDROOM."

PSYCHIATRIST: "THEN WHAT'S BOTHERING YOU?"

BACHELOR TRUCK MECHANIC:
"EVERY NIGHT I DREAM ABOUT MATT
DILLON'S HORSE."

...

Brake Specialist: "Well, Sam, how did you make out on your hunting trip?"

Bee-Line Mechanic: "Oh, I had a bad piece of luck, Bill. I shot my dog."

Brake Specialist: "Was he mad?" Bee-Line Mechanic: "Well, he certainly wasn't happy."

City Dispatcher: "Say, Red, how are you and that new girl of yours getting along?"

City Driver: "Pretty good, I guess. But she's just like an auto radiator." City Dispatcher: "How's that?"

City Driver: "She'll freeze up on you if you don't keep her filled with alcohol."

Shop Foreman (on phone): "Hello, is this the Jones Drug Store?"

Druggist: "Yes it is. May I help you?"

Shop Foreman: "I want two pounds of rat poison."

Druggist: "Do you want us to send it over?"

Shop Foreman: "No! My wife will come by in an hour or so. Just give it to her."

"Hello, is this Wasserman?"
"Yes."

"Are you positive?"

Resume Work

300%

more resistance to overcharge*
greater resistance to undercharge*
the two worst
battery killers

GOULD

and brawny GOULD batteries have these features for long over-the-road hauls or stop-and-start city service.

- thicker stronger plates—for extra miles of service
- new hard-rubber containers—space for bigger plates, extra electrolyte

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- new cell supports—extra protection against vibration, bumps
- new element protectors—reduce damage from careless servicing
- double insulation—stop plate exide shedding
- famed Gould Deepwell—battery goes months without service

Sealed Charge TRUCK - BUS - DIESEL

BATTERIES



STAY STRONGER LONGER

-because of this silver lining

···· HERE'S WHY ·····

Corrosion eats away battery grid material just like rust eats away bare steel. Coated steel lasts indefinitely because it doesn't rust. Similarly, silver cobalt coats the battery grids, protecting them from corrosion. The grids last longer—the battery performs better—stays stronger longer,



Bare unprotected steel rusts



Coated steel resists rust



Unprotected battery grids corrode



Silver cobalt grids

Get the complete silver cobalt story from your Gould dealer — or write

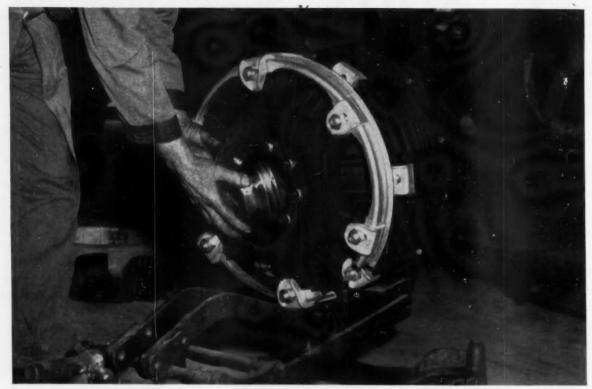
GOULD-NATIONAL BATTERIES, INC.

SAINT PAUL 1, MINNESOTA

*Overcharging and undercharging together account for 80% of all battery failures! New Gould silver cobalt batteries have triple resistance to overcharge, greater resistance to undercharge—compared to SAE minimums.

GET GOULD BATTERIES FOR YOUR FORKLIFT TRUCKS

It costs many times the price not to have INDEPENDENTLY ROTATING DUAL WHEELS



6 outstanding money-saving features

Tires on conventional dual wheels are rigidly tied together and must rotate together. This causes a sliding action when turning corners, passing vehicles, and due to trailer sway. Even on straight highways, there is a sliding action due to unequal tire pairing, crowned roads and bumpy roads.

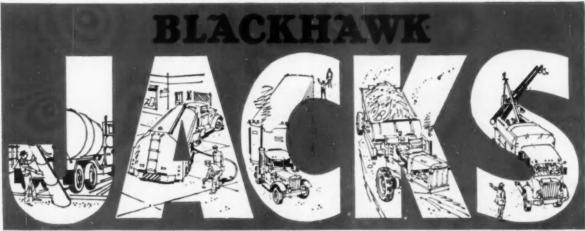
Only ½" difference in tire wear of one tire compared with its mating tire causes 30 feet of sliding every mile. Freeing dual tires to rotate independently eliminates this drag on the engine caused by partially sliding the load instead of rolling it—this has not only shown a doubling of tire life, but also a fuel savings between 5.4% and 13%. Extra maneuverability, safety, and lower maintenance are additional important features. It costs many times the price of Differential Wheels not to own them.

- O DOUBLE TIRE LIFE Eliminates skidding and scuffing of tires only negligible rolling wear remains.
- 2 BIG FUEL SAVINGS Experience has shown 5.4% to 13% savings by eliminating tire drag.
- 3 AMAZING TRAILER MANEUVERABILITY No more trailer sliding while spotting. You can now roll your trailer in close greas.
- BETTER TIME ON TRIPS Saves gear shifting and time on hills. Saves maneuvering time at docks.
- SAFER RUNNING TRAILERS Tires keep grip on road at all times. No tire sliding around corners.
- O LOWER MAINTENANCE Less attention to tires longer drum life — stronger clamping arrangement — no spacer to wear — positive tire alignment.

For further information contact your nearest distributor or write

DIFFERENTIAL WHEEL DIVISION, ANDERSON-BOLLING MFG. CO. GRAND HAVEN, MICHIGAN

eff



service the GIANTS



BLACKHAWK HYDRAULIC HAND JACKS — 1½ through 20 tons; Heavy-Duty Jacks through 100 tons. Preferred for rugged power, top performance.

f



NEW BLACKHAWK WHEEL DOLLIES — slash tire-wheel job time 80%! One man can easily service all 4 wheels. Three models — Capacity 1500 to 2600 lbs.



NEW BLACKHAWK MOBILE LIFTS — full 5,500 lbs. capacity. Lifts front and rear of all trucks. Two-speed air-lift, Mechanical safety latches. Quickly pays for itself.

...baby your service budget!



BLACKHAWK SERVICE JACKS — 1½, 2, 4, 10 and 20-tons. Easy-to-spot, sneaks under lowest axles. "Ten-tonner" handles everything that rolls:



NEW BLACKHAWK T-4 TRANSMISSION JACK — one of a complete line of four models, $\frac{1}{2}$ and 1-ton capacities. T-4 and one man easily handle all makes of truck transmissions!



NEW BLACKHAWK MOBILE CRANES — lift engines, tires, barrels, all bulky equipment, $\frac{1}{2}$, 1 and 2 ton capacities. Also mounted on trucks and docks.

More good news for fleets from the long red line—for bus and truck operators who want more profitable road time, less non-productive time in the shop. Blackhawk offers rugged, brute strength and top-efficiency in *new* fleet service equipment that boosts service efficiency, slashes manhours, speeds routine

inspections of every vehicle you operate.

Make your next jack a Blackhawk! the only complete fleet service equipment line — your one source for the right jack for every job.

Your Blackhawk jobber is waiting for your call. Phone him right now!



WORLD'S LARGEST MANUFACTURER OF MECHANICAL, AIR AND HYDRAULIC-POWERED SERVICE EQUIPMENT

BLACKHAWK

BLACKHAWK MFG. CO., Dept. J-1119, Milwaukee 46, Wisconsin





PORTABLE GRINDERS

ELECTRIC DRILLS

Advanced Design **Balanced Power** Rugged Construction A Size for Every Need Sioux Dependability No Drill is Built to Last Longer

A Dependable, Heavy Duty Tool for Grinding, Buffing, Wire Brushing. 5" and 6" Wheel Diameters. Carefully Balanced for Easy Handling.

Sioux Quality Throughout

HIGH SPEED HOLE SAWS

Sioux high speed teeth hole saws will cut holes from 1/2" to 41/2" diameter in any machinable material.



Round or plate steel, brass, aluminum, bronze, wood, even stainless steel may be cut.

High speed steel teeth welded to chrome vanadium body give maximum life and cutting ability. Used in electric drills, drill press, or lathe.

WIRE WHEEL BRUSHES

Durably built of special brushing wire with wide face, even trim, perfect balance. Designed for heavy duty cleaning, removing, deburring, descaling, roughing,

buffing, and polishing.

Torque or saucer shaped brushes are fast workers for body repair, removing paint, scale or corrosion, cleaning welded joints, etc, Used with Sioux flexible shafts or portable. tools the broad brushing area cleans large areas in less time.





Cor



SINCE 1914

USE SIOUX ALL THE WAY THROUGH

SOLD ONLY THROUGH **AUTHORIZED DISTRIBUTORS**

ALBERTSON and CO., INC. SIOUX CITY, IOWA, U.S.A. NEW AIR IMPACT WRENCHES . NEW AIR SCREW-DRIVERS . NEW "PELICAN" NUT ACCUMULATORS . ELECTRIC IMPACT WRENCHES . DRILLS . PORT-ABLE SAWS . POLISHERS . SCREWDRIVERS . FLEXIBLE SHAFTS . ABRASIVE DISCS . SANDERS . GRINDERS

COMMERCIAL CAR JOURNAL, January, 1959









RAMBLER AMERICAN STATION WAGON

The new 100-inch wheelbase station wagon that costs less to buy and operate. Top economy, easiest handling and parking. Yet offers full 5-passenger room and spacious cargo area for samples and luggage.

RAMBLER AMERICAN 2-DOOR SEDAN

Public utilities and other fleet users who want an economical American-built automobile are switching to the Rambler American . . . room for 5-big passengers. Also available in 3passenger business sedan.

RAMBLER SUPER SEDAN

The compact 108-inch wheelbase sedan that has shattered all sales records. Offers even greater economy in 1959. Costs less to buy and operate. And top resale value, too. Rambler is the soundest Fleet Buy.

RAMBLER CROSS COUNTRY STATION WAGON

Sales and service fleet users, manufacturing companies, many types of businesses find the Rambler station wagon perfect for their needs. Lots of room for tools, samples and display materials.

WRITE OR WIRE

FLEET SALES AMERICAN MOTORS CORP.

DETROIT 32, MICH.

In 1959, More than Ever...

RAMBLER

Remembers the Fleet Operator

LEARN WHY THE NEW '59 RAMBLER IS THE SMART FLEET BUY

Now, more than ever before, it makes good sound business sense to switch to Rambler for your fleet requirements. For while other cars grow bigger, more expensive to operate, Rambler retains its smart compact size and offers even greater economy for 1959. Rambler is quality built, with many comfort and convenience features not available in other cars at any price. Rambler's Single Unit Construction means greater strength, safety and longer car life. And Rambler is tops in resale value among low price cars. Get all the facts that prove Rambler is your smart fleet buy for '59!

FLEET LEASING ARRANGEMENTS AVAILABLE

If your firm leases fleet units, ask your leasing company for low Rambler rates or write us for the names of leasing companies with whom we have working arrangements.

1958 New Truck Registrations

STATE AND MONTH		Brock- way		Dia- nond T	Divce	Dodge	Ford	FWD	GMC	inter- na- tional	Ken- worth	Mack	Poter- bilt	Stude- baker	White	Willys Jeep	Willys Truck	Misc. Dom.	For- eign	Total
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Source: R. L. Polk & Co

* Data secured from Department of Motor Vehicles, State of Oregon

Included under Willys Truck

These **MoPar** "medicines" help engines live a lot longer!

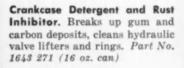
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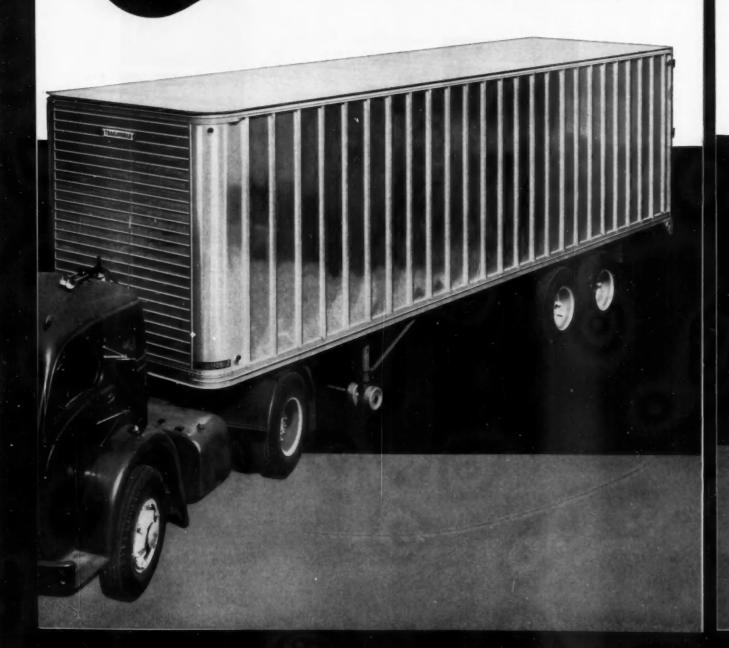
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THE

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With cube and d featu

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And Trail

NEW

loaded nector 7! way new qu to sim electri match

One of six custom design opportunities offered by new SERIES



With the new C-64 trailer you can achieve excellent cube and weight characteristics without the usual and disappointing sacrifice of strength and performance features.

This trim, modern, all-aluminum van utilizes a spacegiving 4" upper fifth wheel to provide a full 96" loading height throughout the trailer. And the inside width is a big 93". This means good cube plus the advantages of straight floor loading.

And weight has been appreciably reduced! The famous Trailmobile tandem is lighter by hundreds of pounds.

*Customer Individualized Design

The props are lighter, too. And a new lighter gauge side panel-strongly reinforced by husky, outside posts on 16" centers-offers an even further weight saving.

The C-64 gives you a new quarter panel (that eliminates leakage) and a new connector case (that simplifies trailer interchange) and many other features that you'd expect to find only in trailers costing much, much more.

We believe the C-64 is an exceptional value. We think you will too.

And remember, the C-64 is just one of six basic custom design opportunities with CID Series '60.

TR-760

RAILMOBILE INC.

NEW WIRING SYSTEM

7 way and 6-way plugs, plus new quick-connecting terminals to simplify interchange when electrical connections do not

NEW TANDEM

Here is the matchless Trailmodel that is lighter by hundreds of pounds. Newly designed rocker beams, a new, more stable 9-leave spring, and direct mounting of tandem to sub frame substantially reduce weight without sacrifice of strength.

NEW QUARTER PANEL

This is a husky aluminum extrusion which allows the roof fastenings to be moved to the outside of the trailer to eliminate the problem of leakage at all fastening points along front and sides. It also permits the roof sheets to be riveted.

NEW LANDING GEAR

This new unitized design brings you strength, light weight and perfect alignment in an easierto-operate prop. A full 17" travel assures proper coupling under any ground condition. In addition, a positive locking feature prevents gears from disengaging while cranking.









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REVIEWING THE BEST IN CURRENT PUBLICATIONS ON MAINTENANCE, EQUIPMENT AND SAFETY OF INTEREST TO TRUCK, BUS AND CONSTRUCTION FLEET OPERATORS

ATA "Who's Who"

from Commercial Car Journal
56th and Chestnut Sts., Philadelphia 39, Pa.
is the 1958 edition published in connection with American
Trucking Associations silver anniversary convention.
Listed are the state truck associations, their addresses and
their managing directors. Also shown are ATA staff
members and truck operators and manufacturers in attendance at the convention. Write us for free copies.

Better Driving

from Prentice-Hall, Inc.
70 Fifth Avenue, New York 11, N. Y.
could well save a few lives. It presents the facts a driver
should know if he wants to stay out of trouble. Based on
the combined thinking of some 60 traffic authorities, it
is clearly written and well illustrated to get its message
across to the average motorist. Starting with an analysis
of the present accident situation, it lays the basic responsibility on "the average driver," shows him how to
become much better than average. Price for the 130-page
book is \$1.60.

Tank Truck Data Sheets

from National Tank Truck Carriers 1424 16th St., N.W., Washington 6, D. C. provides tank truck operators with complete information on 35 different commodities. Shown are the characteristics of each commodity, recommended equipment, loading, lining, insulation, pumps, hose, corrosion problems, special precautions, methods of cleaning, and what to do in case of a spill. Each of the 35 sheets contains a separate commodity. Included are acids, fuels, oils, paints, and food products. The complete set sells for \$5.00, individual sheets are 25€ each.

Dynamometer Films

from Clayton Mfg. Co.
Box 550, El Monte, Cal.
explain the use of chassis dynamometers in automotive
and truck maintenance shops. Both are 35 mm sound
strip films covering subjects such as engine analysis and
transmission and drive line trouble shooting. Also shown
is the efficiency of a chassis dynamometer for fast quality
control tests. Both films are available on a loan basis
by writing Clayton at the above address. Use your
company's letterhead.

Fleet Car Costs

from The Dartnell Corp.
4660 Ravenswood Ave., Chicago 40, Ill.
gives facts and figures on salesmen's car allowances and
cost control methods. It is based on the experience of
400 companies operating more than 54,000 business cars.
Called "Salesmen's Car Allowances and Practices", it
contains fleet operation costs, methods of reimbursement
for employee-owned vehicles, a discussion of depreciation
policies and plans, and the experiences of 10 companies
which have made recent fleet plan changes. Price is
\$12.50 on approval.

Spark Plug Manual

from The Electric Auto-Lite Co.

Toledo 1, Ohio
covers the complete story on spark plugs from sales to
servicing. Written by Auto-Lite ignition specialists, it
covers basic points of spark plug service in all types of
operation. The manual tells how to service the ignition
system, how spark plug heat range is determined, basic
types of plug fouling and how to correct them, heat
range charts for all types of plugs, and suppression of
ignition interference for two-way radios. The Spark
Plug Service Manual is available only through AutoLite distributors. Price is \$1.00 per copy.

Tune-Up Charts

from Automotive Electric Assn.
16223 Meyers Rd., Detroit 35, Mich.
cover specifications on all 1958 passenger cars. Individual
charts for each make and model contain exact factory
specifications and latest engineering changes necessary
for proper tune-up work. Also included are specifications
on many of the ignition and carburetor power packages
offered on '58 models. Complete wiring diagrams are
included. Price of the series is \$3.00.

ICC Motor Carrier Regs

from American Trucking Assns.

1424 Sixteenth St., N.W., Washington 6, D. C. are completely revised in an up-to-date edition recently released by ATA. It includes all amendments in Part II of the Interstate Commerce Act made by the 84th and 85th Congresses. Price of the new edition is \$2.50 per copy.



GAUGE! INFLATE! SEAL! YOU MUST HAVE ACCURATE GAUGING!

Every tire repair job means deflating, inflating, and gauging. With the Schrader Chuck Gauge . . . a typical Schrader laborsaver . . . you can do all three with one device! Anyone can use it right, fast. Teamed up with Schrader's other gauges . . . famous for accuracy . . . and other Schrader tire re-

pair products, you and your service personnel get more done in less time, with less trouble.

And remember, no tire job is complete until you seal the air in with genuine Schrader Caps and Cores. Your Schrader supplier has them all.





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FOR ORIGINAL EQUIPMENT AND REPLACEMENT

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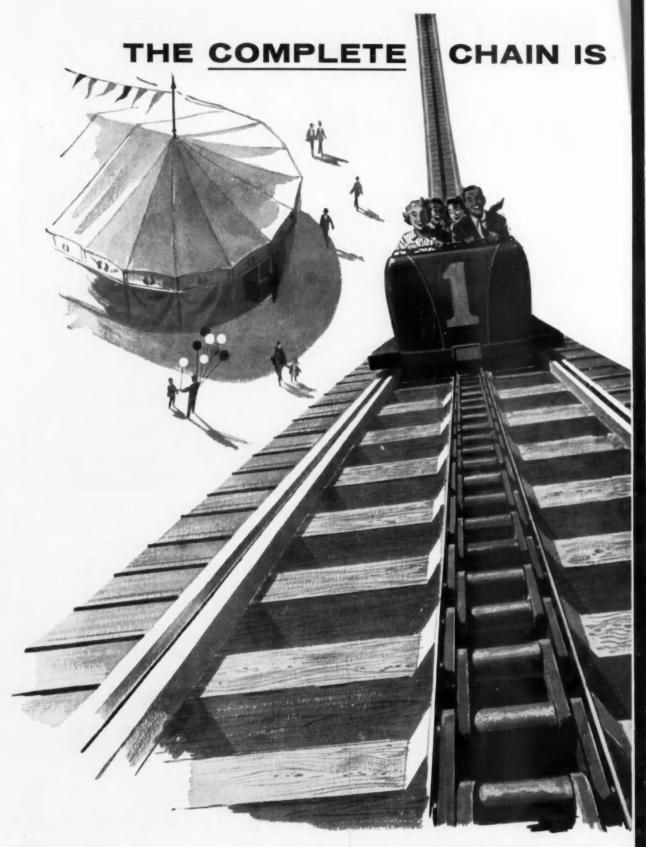
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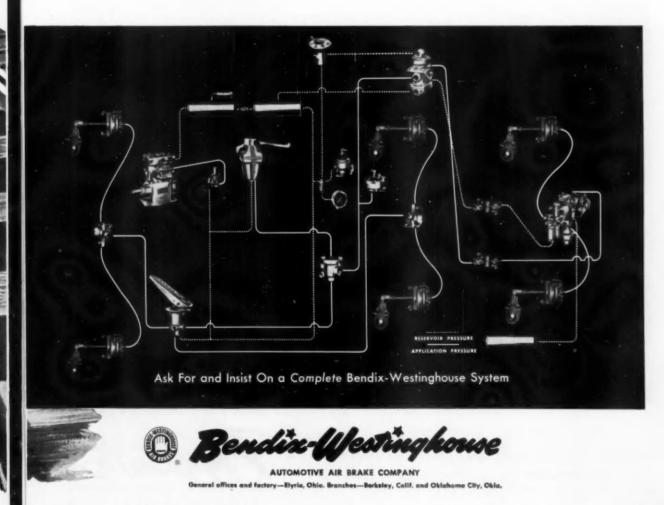
WHAT COUNTS!

Yes . . . the complete chain . . . made of safety-forged, matched links . . . with the built-in dependability and performance that only an experienced chain maker can deliver. It's the same with air brakes. You could buy a link here and a link there. But you get by far the most efficient, most reliable performance when you specify a complete Bendix-Westinghouse Air Brake System. It, too, is engineered as a complete "chain" in which every part and every component is system-engineered to do its specific job with peak efficiency. And for that reason you not only get top performance with Bendix-Westinghouse—but get it over a longer period of time and at less cost than is possible any other way.

Best proof of this is that more trucks and buses are equipped with Bendix-Westinghouse Air Brakes than with all other makes combined. These thousands of truck and bus operators who make up the Bendix-Westinghouse "family" long ago proved an important fact to their own satisfaction—that it pays to let us assume full systems-engineering responsibility for air brake performance, dependability, and long, economical service life.

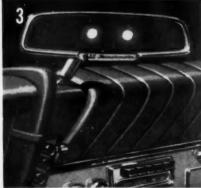


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- New Swivel Seats* boost driver morale, impress customers.
- **5** 3-stage carburetor saves up to 15% on gas in middle speed range.
- 2 Total-Contact Brakes provide surer stops; linings last longer, too.
- 6 Push-Button Control Center for driving, heating, ventilating.
- 3 New Mirror-Matic* rear-view mirror automatically dims glare.
- 7 Torsion-Aire Ride means smoother riding, less fatigue. No extra cost.
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- 8 Automatic Beam Changer* dims headlights for greater safety.
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SAVE up to 75% and have cleaner, better looking vehicles . . operates as QUIET as a vacuum cleaner!



FREEL "POWER-JET" STEAM CLEANER Plus FREE "POWER-VAC" VACUUM CLEANER





Model 810-PV11/2

Send for free catalog and details on this unprecedented, tremendous offer! Find out "how" a Choldun TRUCKWASHER, sizes from 30' to 65', will help eliminate your fleetwashing problems. And, take advantage of our 10th Anniversary Special!

> Note: As an alternate choice, you may select FREE "Auto-Magic" Carwasher, CW400-21, instead of FREE Steam Cleaner and Vacuum Cleaner.

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FORT WAYNE, INDIANA

COMMERCIAL CAR JOURNAL, January, 1959

▶ Keep Costly Rust in Check with Ditzler's

FERROCHROME PRIMER

(RUST INHIBITIVE)



- Flash-Dries in 15 Minutes
- Needs No Sanding
- Has Excellent Adhesion to Bare Metals or **Old Surfaces**

Let's face it-salt and brine are almost as tough on truck paint jobs as they are on ice and snow. All winter long they're eating away, causing rust and corrosion. But now you can lick this profit-robbing waste-with Ditzler's remarkable FERROCHROME PRIMER DPE-1202.

- A potent rust inhibitor, this special red oxide primer gives both body metal and chassis real protection.
- FERROCHROME cuts down time, too. It speeds painting because it sticks skin tight to bare metal and aluminum as well as to old enamel or lacquer.
- It flash-dries in 15 minutes and requires no sanding. Finish coats can be applied immediately after flash-off. Because color and primer dry down together you cut out one drying. Where enamel jobs are force-dried or baked, FERROCHROME prevents enamel from soaking into old finish.
- Give FERROCHROME PRIMER a try. It will definitely cut your costs, save time and keep your paint jobs looking new longer. Why not call your local Ditzler jobber today?

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Without Fading - Doubles Brake Safety!

Firestone's NFB (*No Fade Bus) brake block combination delivers reliable, positive braking action at all times . . . without fading!

Firestone NFB brake blocks, precision built with an exclusive friction formula, are fortified to withstand more than twice as much heat—to 1300°, far ABOVE fade limits of ordinary brake blocks. This wide margin of safety makes Firestone's NO-FADE guarantee possible.

It's no wonder Firestone NFB brake blocks make a big hit with bus owners everywhere because no other brake block

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combination can take the same day-by-day repeated-stop punishment and come back for more. Once you install NFB brake blocks you'll find buses roll up more miles between relining jobs, maintenance costs go down and drum breakage is substantially reduced.

Put new economy, new safety at every wheel on every bus with a Firestone NFB brake block combination . . . guaranteed to stop heat fade in the most severe operating conditions. Contact your Firestone representative today or write The Firestone Tire & Rubber Company, Akron, Ohio.

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BETTER RUBBER FROM START TO FINISH
ALL THE WAY...



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TIRES



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BATTERIES



A CCJ Eyewitness Report by Editor Bart Rawson

RECENTLY I had the good fortune of visiting the principal cities of Alaska. For weeks before and after the trip, other members of our editorial team—notably Warren Crane of Seattle—were busy gathering additional data and pictures. We ended up with enough material to fill a full-sized book.

To get the picture straight you must think of Alaska as an island with about 80 per cent of its population centered in the Anchorage-Fairbanks area.

True it shares a big land boundary with Canada. True there is a land "bridge" via the Alaska Highway. But one look at the specially prepared map above shows why most freight still moves by water.

Those black lines indicating the water routes from Seattle to the port cities in central Alaska are very close to a thousand miles shorter than the white line showing the overland route via the highway!

(TURN TO NEXT PAGE, PLEASE)

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ALASKA

Continued from page 69

First we'll take

a look at how the freight gets to Alaska—then visit with some of the local fleets. In the process we'll justify the statement: "If you've got it, a truck brought it." And for good measure, we'll show how more and more of the volume comes all the way by truck—or at least in trailer-sized containers.

In all fairness though, we need a word here about the other forms of transportation. Alaska Steamboat Co.—sole survivor of more than a score of early competitors—still carries the lion's share. But on all its sailings, you'll see a growing number of shapes that look an awful lot like trailers—plus many smaller containers.

In 1957 this one carrier hauled 683 forty-footers, 1199 twenty-four-footers and 113,147 cribs—a 60-cu ft collapsible wooden container. There also was a sizable volume of "guards"—a somewhat larger weatherproof metal container. And all numbers are still growing . . . fast.

Then there is the

Alaska Railroad. Government built and owned, it chugs through the mountains from Seward and Whittier (an all-military port) to Anchorage and Fairbanks. You can't belittle the part it has played — particularly in the military growth of Alaska. But like all railroads, its tracks are inflexible and there probably won't be any more.

And of course there are the airlines and privately-owned planes. Alaskans own more planes, fly more miles than any other people in the world. Today virtually all passenger traffic between Alaskan cities and the "mainland" is by air. Along with them flies so much "rush" freight that most of the airliners have moveable bulkheads to get the most out of either passengers or freight.

Tied in with all these forms of transportation is the ever-present (TURN TO NEXT PAGE, PLEASE)



Garrison Fast Freight loads its special 24-ft Utility reefers in Seattle. Like Alaska Freight, the Thermo-Kings are all-electric



Center slots and Clark-Ross loader make handling a snap

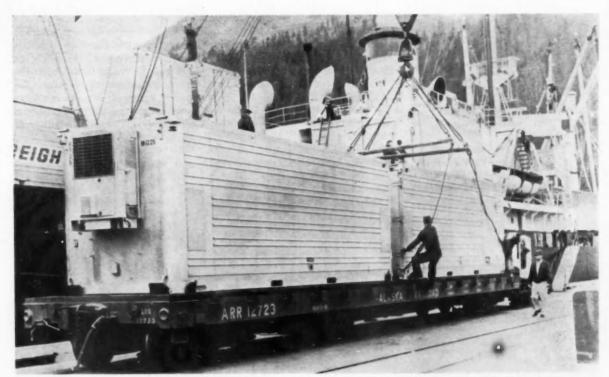


For longer moves at dock side, the straddle trucks take over

Garrison Combines

On board on Alaska Steamship freighter, Garrison containers share space with those of Alaska Railroad. Ship has power for reefers





At Seward Garrison's combined fishy-back, piggy-back-operation comes into its own. Here boxes

are crane-loaded from "Alaska Steam" to "Alaska RR" for rail hop to Anchorage and northern points

Kenworth conventional tractor has unconventional 275-gal fuel tank and demountable generator set

Fishy-Back with Piggy-Back

Morning train has just pulled into Anchorage, a power car, two trailers and string of boxes



Garrison's Fairbanks dock features tight seals around doors. Its sizeable shop is to the right



Manager George Sullivan says smoke on trailer comes from steamboat, not diesel exhaust



COMMERCIAL CAR JOURNAL, January, 1959



ALASKA

Continued from page 71

truck—making essential pick-ups and deliveries at both ends of the

Garrison Fast Freight, a division of Consolidated Freightways, is a relatively new-comer. But it's champion of all in welding together water-rail-truck freight hauling. Its combined fishy-back, piggy-back operation (described in words and pictures on pages 70-71) makes it the largest customer of both Alaska "Steam" and the Alaska Railroad.

It now offers container load service from any point in the United States to any of the key Alaskan cities. And when the flyboys are ready to birdy-back, you can be sure Garrison containers will be slung aboard.

But today it's strictly a water

and ground operation. When the trains pull in to either Anchorage or Fairbanks, Garrison tractors and trailer chassis are ready to highball the loads to final destination. Sometimes these points are widely scattered, so there is always long range "power" available for all-highway shipments—right from the port.

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Next to Seattle, Garrison's biggest shop is in Fairbanks. And since it's not very handy to ship tractors back and forth by water (it does when needed), the Alaska



Alaska Freight Lines hauls 36 forty-foot boxes on barges like this, plus general freight in hold

and passenger cars on top. Two diesel generator sets on bow supply 220-volt power for reefer units

Alaska Freight Makes the

A forty-foot box comes off the barge at Anchorage during summer months, year-round at port of Valdez



Kenworth tractors handle the runs between Valdez, Anchorage, Fairbanks. Note generator behind cab



COMMERCIAL CAR JOURNAL, January, 1959

shop has good facilities and fair sized stock of replacement parts including engines and other components. There's another smaller shop and an excellent new terminal at Anchorage.

Alaska Freight Lines,

the pioneer truck carrier to Alaska and still the biggest, uses a different approach. It ships everything —mostly containerized—via its own tug and barge line. You see the highlights of this operation below.

It's a man-sized operation to get

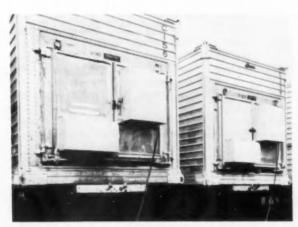
the tows through, particularly in winter months. The man who gets most of the credit is Capt. Guchee. He's in charge of all of the company's waterborne operations. (As we talked to him dockside in Seattle I learned that he had skippered the tugboat "Arthur Foss," used in the filming of "Tugboat Annie.")

Alaska Freight also has good maintenance shops at both Fairbanks and Anchorage. Like most shops in Alaska, they're designed to garage overnight all power units needed the next morning. For

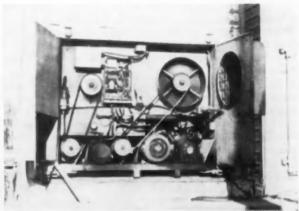
when the mercury hits 40 below only rigs housed inside will start.

Lynden Transfer, Inc.

is the third truck carrier to Alaska. A good bit smaller than either of the other two, it is the only one that has regular schedules over the Alaska Highway. As you will see later on, it's not an easy run. But it seems to be paying off for owner Henry Jansen who parlayed a small trucking company in Lynden, Wash., into one of the longest haul (TURN TO NEXT PAGE, PLEASE)



Because it takes up to seven days to make the run from Seattle to Fairbanks, these heavy-duty Thermo-



Kings are electric. Power is available at docks and from generators on barges and road tractors

Water Hop with Its Own Barges

Alaska Freight's main shop at Fairbanks is remarkably well equipped for major and minor service and



COMMERCIAL CAR JOURNAL, January, 1959

. . . like other Alaska fleet shops, it's big enough to house all power units when mercury hits bottom



ALASKA

Continued from page 73

carriers in the world. (At right is a typical Lynden rig used on the four-day Seattle-Fairbanks run over the Alaska Highway.)

On this run, all of the maintenance is done either at the home shop in Lynden or by the drivers enroute.

But I can speak

from experience. It gives you a real thrill to see one of those big rigs come throbbing into Fairbanks and realize that those two guys up front have been rollin' non-stop four days and four nights up that lonesome road—a mighty long way from Seattle.

Then there are still others that make the same run but on much less regular schedules. For instance one night I saw a rig very similar to a Lynden job—40-ft trailer and Kenworth tractor. (They seem to be all Kenworths in Alaska.) I later learned it was leased to K & L Distributors, a liquor broker.

Another fairly regular run from Seattle is made by "Anco"—the Anchorage Cold Storage Co. Still another important link is made by Western Express from Great Falls, Mont., to Alaska.

But still the great

bulk of freight goes by water (or air). And those are the only alternatives for the smaller cities such as Juneau—the capital, Ketchikan—the southernmost city, Sitka—now building the largest pulp mill in the world, Nome—on the west, Barrow—at the far north, or Kodiak—in the great bear country.

Yet no matter how the freight gets there—even in the isolated cities—final delivery is by truck.

Among the larger

local cartage fleets is Sourdough Express, Inc., in Fairbanks. I spent some time with President Leo Schlotfeldt. It didn't take but a moment to sense his pioneering spirit.

He began with strictly local cartage, soon branched out to coal and fuel oil delivery. Then came the containers—in the form of United Van Line "boxes" (about 8 x 8 x 10 ft). Today many military families at Ladd or Eilson Air Bases get their final move via Sourdough.

This fleet's shop is not the world's handsomest, but it is well-stocked and well-manned for normal repairs. There are about 50 vehicles

in the fleet. And like the long-range carriers, its winter operations are geared to get all they need for tomorrow's trips inside tonight.

In Juneau the

"big one" is Alaska Transfer, Inc. Its trucks are a little ancient but adequate for the job of hauling freight from the docks or airport to final destination. All told the Juneau area has about 45 miles of roads "to nowhere and back."

Within the limits of its highway system, the area operates like any other. There's a goodly number of trucks and passenger cars that make a fair pass at rush hour traffic jams.

Juneau also has

the best bus "fleet" in Alaska. Sure there are bigger ones in Fairbanks and Anchorage. But as is often the case with local transit, they find themselves with over-extended lines and dwindling traffic volume.

(There's an interesting footnote on that one. Just after the war about 90 per cent of all "Americans" in Alaska were men. Then as they found jobs and settled down, they brought or acquired their families. With them came passenger cars. Result is busmen no longer have the volume from work area to residential sites.)

Bureau of Public Roads has biggest fleet, handles maintenance of through roads. With statehood it will become Alaska Highway Dept.



Peter Kiewit at Fairbanks is one of many big contractors in area



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COMMERCIAL CAR JOURNAL, January, 1959

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Lynden Transfer, Inc., is only regularly scheduled common carrier using the Alaska Highway. Twoman driver teams on the Kenworth sleepers make the run from Seattle to Falrbanks in four days. . . . but the 2400-mile run is pleaty tough

Drivers must be mechanics too, equipped to fight it out on their own in way-below-zero weather. They carry four spare tires under their Aero-Liner trailers, plus a sizeable array of parts for both tractor and gas-powered Thermo-King. Weather the state of the state

Lynden Goes All the Way by Road

So back to my friend Ralph Kibby of the Juneau City Bus Co. He's owner, mechanic and only regular driver for the line. Yet he maintains regular schedules around the Juneau loop and across the bridge to suburban Douglas. The main "fleet" consists of one 1957 Marmon-Herrington chassis equipped with a deluxe Carpenter school bus body and the big Ford V-8 engine.

I rode from one

end of the line to the other. The service was excellent, the equipment top grade. And Kibby showed me his two other buses with which he runs summer sight-seeing tours, using part-time drivers.

Jumping back to Anchorage, you find many other local fleets. Probably the biggest home-based carrier in Alaska is the combination of James Burke & Co. and Weaver Brothers, Inc. They make regular runs between Anchorage and Fairbanks and in between for both dry freight and petroleum products. Also, there's Herda Truck Lines and Melvin Matteson's Wood Express.

Then like everywhere

else, private truck operators account for a great percentage of the truck population. One of the biggest is Grocers Wholesale, Inc., with 5000 different food items in stock and a fair sized fleet. One of the most interesting is Jack Anderson's Tatco Warehouse & Storage Co.—the only bonded warehouse in Alaska. You name it, Jack's got it.

We still haven't gotten to the biggest and best-equipped fleet in all Alaska—the U. S. Bureau of Public Roads. In Alaska it corresponds to a state highway department and will become one when statehood is implemented.

It has excellent

shop facilities in both Anchorage and Fairbanks. Its fleet of some 2000 vehicles ranges from passenger cars to large rotary plows.

Fleetmen worried about their parts inventory should see what District Engineer M. C. Zimmerman has to put up with in his Anchorage depot. Remember it's a mixed fleet and a mighty long way from factory sources of supply.

Still on the subject of private fleets, there are of course the utilities—a big one in Anchorage. And you'll find an interesting classification in both the Anchorage and Fairbanks phone books—"Thawing." It rates a number of listings. It's mute tribute to the fact that it does get cold. And as we've noted, all truck operations have to be geared to this fact.

But it wasn't cold

when I was there. And it isn't cold most of the year. Give and take about four months of winter and you'll find the rest of the year pretty close to ideal with flowers and swimming pools.

No comment on Alaska would be complete without mention of Northern Commercial, Inc. You may have heard of it as the great trading post pioneer. But did you know it also operates a number of department stores—including one in Anchorage that would do credit to any but the largest of U. S. cities? It's also one of the world's largest Caterpillar distributors.

(TURN TO PAGE 116, PLEASE)



SHOP

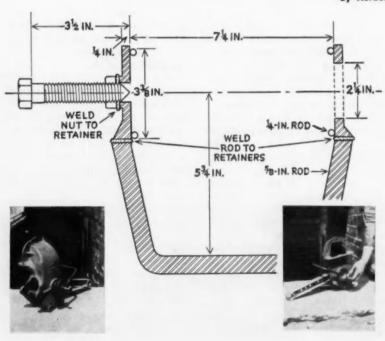
\$10->

\$25

Send us a short description and photograph or simple sketch of the shop-made maintenance short cuts you are using. We'll pay \$10 and \$25 to those who submit good ideas

Mounting Tool Speeds Bushing Job on Fruehauf Trailers

By Herbert Engel, Berman Sales Co., Pottstown, Pa.



Here's a real labor-saver for installing radius rod bushings on Fruehauf trailers. It's basically a clamp with guides for pushing the rubber bushings into the housing. Bolt on end permits pushing the bushings "home" as you take up on the threads. Using the tool, it's a one-man operation.

Make the tool out of 5/8-in. and 1/4-in. steel rod, plus steel plate or large washers. See sketch at left for dimensions. Threaded bolt should be 5/8-in. US Standard. Weld the nut in place as shown. Assemble the bushings, radius rod, etc., in the hanger as shown in left photo. Tighten bolt on the tool to compress bushings in the hanger. This gives sufficient room to put on bushing bolt nut, as shown in right photo.

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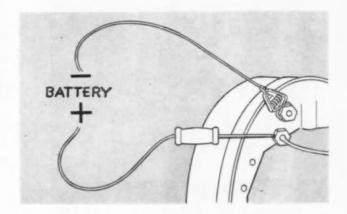
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To "Thaw" A Fitting . . .

By Jean Babin, Columbian Laundry, Newark, N. J.

Ever have rusted or frozen brake line fittings which are impossible to remove without chewing up the fittings or twisting the lines? Here's a shop hint that solves the problem nicely. Use a small 6-volt soldering iron, preferably the carbon tip type. Touch the tip to stubborn fitting for a few seconds. Usually the small amount of heat is enough to free the frozen fitting. It can then be removed with a wrench. Result: Big savings on parts and time.

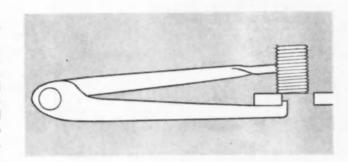


To Align U-Bolts . . .

By Casey Ostrowski, Sunnyside Ave., Chicago 30, III.

Here's a way to avoid stripped U-bolt threads when changing heavy truck springs. Make an aligning tool from two pieces of 1/4 x I-in. steel stock 8 to 12-in. long. Rivet heads together allowing arms to open and close freely. Make a small hook on lower arm end, as illustrated. Twist top arm end 90 deg to form a flat horizontal surface. Shape this end to fit contour of U-bolt.

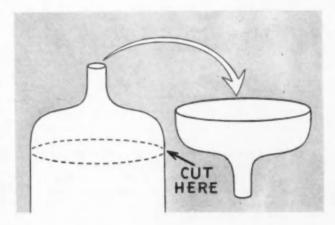
To align, place hook end in bolt hole and contoured end against shank of misaligned bolt. Pull upwards on the tool and bolt and hole will align perfectly.



To Fill A Battery . . .

By B. A. Nims, Conservation Service, Lincoln, Nebr.

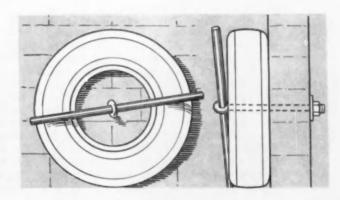
Here's an easy way to put electolyte in new drycharged batteries. Take an old plastic electrolyte container and cut the top off, as illustrated. Top portion when inverted makes a nice plastic funnel for filling battery cells. No more spilling to worry about and being plastic, no corrosion problems.



To Inflate A Tire . . .

By G. D. Lynch, George's Garage, Asheville, N. C.

Here's a safety device to use when inflating truck tires having lock rings. Mount a 1/2-in. diameter eyebolt in the shop wall. Make sure it is long enough to protrude through the center of a standing truck tire. Stand deflated tire over the eyebolt and run a steel bar through the eye. (See sketch.) Should the lock ring pop off while the tire is being inflated, the bar will hold it back.



TO STOP ACCIDENTS — TRY THE SHOCK TREATMENT

When West Bros. needed results in a hurry, President Harvey West added top brass to the safety formula

By Bill Palmer

YOU'RE PRESIDENT OF A FLEET. In 1955 you acquire another fleet. With it, you get a new crew of drivers. One look at their accident record and one listen to the moans of your insurance people and you know you've got trouble. So what do you do?

If your name's Harvey West, of West Bros. Motor Express, Hattiesburg, Miss., you realize that there isn't time for the standard retraining approach. You need results... and you need them in a hurry. So you decide on "the shock treatment."

What's "the shock treatment"? To your drivers, it means that when they're involved in a serious accident, they have to report to you, in person. Your terminal managers get standing instructions to call you immediately when there's a serious accident—even at three in the morning. When you get the word, you're on the way to the scene within a half an hour. If anyone's injured, the company's lawyer goes with you.

Sure it's a drastic approach. But it works. In 1956 you spend a lot of time in investigation. But, combined with a stepped up safety program, it pays off. The accident curve breaks sharply downward. The accident-free mileage piles up.

In 1956, about seven out of 10 of your drivers rated no-accident awards. In 1957, the awards go to almost nine out of 10. In 1957 you make four investigation trips. That's an 80 per cent improvement over 1956.

And in the 1957 accidents, there are no injuries; no fatalities and only \$6000 property damage. In a two-year period, your insurance costs drop 25 per cent.

By 1958, with the fleet covering

four million road miles and 600,000 city miles, the record shows better than a million miles per accident. For your 60 road drivers and 150 PU & D men there's added reward in the form of a fistful of national and state awards for improving the record and preventing accidents.

There's more to the safety program than an active president, of course. But Harvey West's experience shows what can happen when the top brass in a fleet puts emphasis where it's needed most.

Drivers know that

they have to make an in-person accident report to top management. Harvey West gets most of the reports, but some are made to Macon West, executive vice-president in New Orleans, or to Nelson Innis, vice-president for traffic, sales and safety. This is enough to make them just a little extra-careful.

There are other benefits. . . .

Shippers like the idea that the carrier's president is actively concerned with the safety of their car-

The public feels assured that West Bros. respects their rights and safety.

The insurance company appreciates the coopera-

Police officials realize that the company is on the side of respect for the law.

Other elements of the program are

directed by "Nelse" Innis. He spurs on and guides the safety meetings and contests as well as the training for drivers and terminal personnel that are part of any good fleet safety program.

A unique feature of the program is the stress on the fact that truck drivers "work in a goldfish bowl." "Safety is no private little family problem with us," Innis points out, "We see to it that everybody concerned gets in on the act!"

West Bros. Motor Express also

runs quarter-page ads in various newspapers before each holiday urging all drivers to be careful and pledging care at all times by the company's drivers. Some are National Safety Council advertisements, others are made up to fit particular occasions. All West Bros. personnel hear enough comment about the ads in their own social life to know that they are widely read and remembered. The fleet also supplies large

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calendars bearing safety themes for every room in the schools of several cities.

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Monthly meetings for the

Hattiesburg road and city drivers are held at the local Highway Patrol Headquarters. It has a meeting room that seats 100. The walls are lined with very dramatic pictures of the worst accidents occurring in Mississippi over the past 10 years. The Patrol's Chief is generally on the program for at least a short talk.

Here drivers and patrolmen get acquainted under the "best psychological conditions." Drivers learn the Patrol works for the good of everybody. They are persuaded the cops aren't just "out to get the truckers." By the same token, the patrolman who may have met a string of "wise guys," finds most truck drivers are well-meaning, law-abiding joes.

The goldfish-bowl viewpoint

removes safety from being one of the boss's pet quirks. Drivers find every one concerned about safety. Since it's fashionable to be safety conscious, the men are more receptive at terminal safety meetings held every Monday morning.

One recent step by Harvey West is also having a beneficial effect. He receives reports from ICC's Mississippi office on arrests of the fleet's drivers involving dangerous traffic violations. (The ICC gets these automatically from the Mississippi Highway Patrol.)

If the violation is obviously

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flagrant and without extenuating circumstances, Mr. West has photostatic copies made of the ICC letter. which includes names and dates. He writes a covering letter discussing the violation. This is multigraphed, and copies of both are mailed to all road drivers, to union locals and to all terminal managers. The latter post them on the terminal bulletin boards.

"This is one time." states Mr. West, "when disciplining an employee in private doesn't work. We still have one or two drivers-excellent in all other respects-who persist in cheating the traffic law, mostly by speeding. They're the kind that think you get traffic tickets like you catch the measles-an act of God! One dose of the ICC letter usually cures them!"

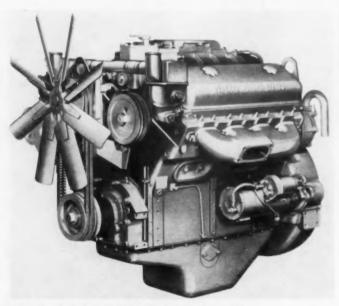
Improved safety record gained awards for West Bros. Above (from left): Vice President Nelson Innis, President Harvey West and Vice President Macon West with an award from Louisiana Truck Assn.

This is one of a series of pre-holiday advertisements which West Bros, sponsors in newspapers in its area as part of a program aimed at getting public support

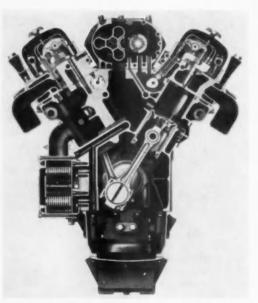
COMMERCIAL CAR JOURNAL, January, 1959







New line includes V-block diesels in 6, 8, 12 and 16-cyl models. Most parts are interchangeable with GM's 71 Series straight block engines



Series 71 Y-block engines have dry liners. Left cylinder bank is staggered 1,2 in. ahead of the right bank. Engine width has been held to 35 in.

GM Ups Power, Cuts Weight and Size

It adapts features of latest in-line 71
Series to new V-block 71's in 6, 8, 12 and
16-cyl models . . . scales them down for
a new 53 Series of smaller diesel engines

Model No.		Exhaust	Rated	Weight		
New	Present	Valves per Cyl	Intermittent Hp @ Rpm	Lb/Max. Hp	Lb1	
2-53		2	45 @ 2000	16.4	740	
	2-71	2 2 2	65 @ 2000	14.8	960 890 890 1525	
3-53		2	75 @ 2200	11.9	890	
3-53		4	94 @ 2800 102 @ 2100	9.5	890	
4-53	3-71	2	102 @ 2100 103 @ 2200	13.5	1525	
4-53		4	127 @ 2800	8.2	1040	
4-00	4-71E	1 4	140 @ 2100	11.1	1780	
	4-71	2	143 @ 2100	11.2	1780	
	4-71T	4	171 @ 2300	9.4	1900	
6V-53		4	190 @ 2800	7.1	1340	
	6-71E	4	210 @ 2100	9.1	2190	
6V-71	0.00	4	210 @ 2100	7.7	1855	
	6-71 6-71T	2	219 @ 2100 236 @ 2100	9.0	2190	
8V-71	0-711	4	280 @ 2100	7.2	2300	
0.4-4.1	6-110	2	300 @ 2000	10.9	3260	
	6-110	4	300 @ 2000	10.0	3260	
	6-110T	4	360 @ 2000	9.1	3410	
12V-71		4	420 @ 2100	6.7	320	
16V-71		4	560 @ 2100	7.32	4710	

^{1 -}Production weight. 2 -Estimate.

NEW DIESELS from GM's Detroit Diesel Engine Division retain the advantages of latest 71 Series in-line models, but add two entirely new designs....

 V-block models in 6, 8, 12 and 16-cyl sizes in the 71 Series.

● New 53 Series 3 and 4-cyl in-line and V-6 engines. They're a scaled-down version of the 71 Series designed for applications where diesels were previously thought "too heavy."

Their advantages can be summarized as higher horsepower, lighter weight, smaller size, parts interchangeability with 71 Series in-line engines.

At the meeting announcing the new power plants, COMMERCIAL CAR JOURNAL'S Detroit Editor learned that GM has commitments to supply the new engines to Kenworth, Freightliner, Diamond T, FWD, Hendrickson, Oshkosh and Peterbilt. Also, of course, they'll be offered in GM's trucks and buses.

Chart at left shows how

the new 53 Series and new V-block 71's compare with present 71 and 110 models—which are being continued. (Not shown are "doubled-up" models such as the Twin 4-71, 6-71, 6-110, the Quad 6-71 and the Twin V-12 and V-16. This last in turbocharged version is rated at 1650 maximum bhp.)

For vehicle use, GM gives maximum horsepower

New (aboveral)

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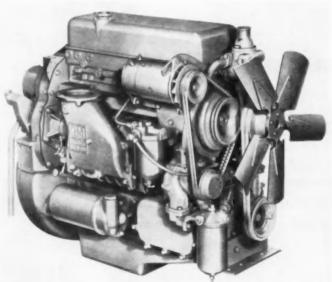
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New 53 Series diesel engines come in 2, 3, 4 (above) and V-6 versions, have wet liners. Several parts are interchangeable with 71 engines

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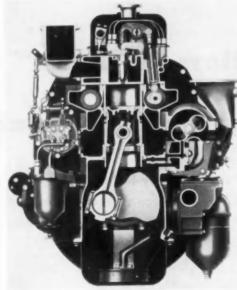
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Straight block models in the 53 Series measure 26 5/16 in. wide, 33½ in. high. Length is 25 in. for 2-cyl model, 33¼ for 3-cyl, 38 11/16 for 4-cyl

in New Diesels

ratings of 97 for the 3-53, 130 for the 4-53, 195 for the 6V-53. New 6V-71 is rated at 252 HP and the 8V-71 at 280. GM says the new 6V-53 produces 175 bhp @ 2400-2500 rpm, recommends it for combinations up to 55,000 lb GCW and buses up to 50-passenger. One advantage, it says, is that its torque characteristics allow use of standard transmissions designed for gasoline engines, reduce drive line and axle costs compared to usual diesel-powered vehicle.

When it comes to size, the

new 53 Series engines measure 265/16 in. wide, $33\frac{1}{2}$ in. high. Shortest in length is the 2-53 measuring 25 in. The 3-53 goes $33\frac{1}{4}$ in. and the 4-53 is 3811/16 in.

The 6V-53 has the same cylinder size with V-block. It measures—fan to flywheel—34 in. long. Height is 36 in., width 31½ in. Says GM, the new 53 Series engines gives to "users of small trucks, buses and even taxicabs" the advantages of diesel engines.

Practically all parts of the

new V-71 engines are interchangeable with present in-line 71 engines except such obvious components as cylinder blocks and crankshafts. The new 53 Series has much parts interchangeability with the 71 Series—including injectors, push rods, cam followers, throttle control parts and rear-mounted accessories.

V-block engines are designed to use same timing gear trains as in-line engines in the same series. Also pistons are interchangeable within each series—53 or 71.

Three cylinder heads cover

the entire line of 71 Series engines—a 3-cyl head on the 6V-71, a 4-cyl head on the 4-71, 8V-71 and 16V-71 and a 6-cyl head on the 6-71 and 12V-71. The 3-53 cylinder head is used on the 6V-53 engine.

All the new engines, like GM's present models, are 2-cycle. Two-valve cylinder heads are standard but 4-valve heads are available as ilsted in the chart.

By and large, the 53 Series is a scaled-down version of the 71 series. Biggest difference is that the 53's have wet cylinder liners as compared to dry liners on the 71 engines. The 51 Series loop-scavenged engines are discontinued.

Block of the V-71 engines has

a 63½ deg V-angle with left bank of cylinders staggered 1.2 in. ahead of the right. V-71 crankshafts are conventional, large-journal type with side-by-side rod design. To carry the increased loading, main journal and crankpin diameters are increased—from 3.5 to 4.5 in. on main journals and from 2.75 to 3.0 on crankpins. Increase in crankpin diameter was accomplished by reducing bearing shell thickness 1/32 in. and notching bearings at the split line for clearance with cap bolt.

Four-valve operating mechanism now incorporates a new clevis-type bridge actuating transverse pairs of valves. This, says GM, automatically balances valve lash, reduces spring and high-speed follow problems because of lighter weight.

How to "Read" a Spark Plug to Pinpoint Your Trouble

Here's the way to tell if your plugs are too "cold" or too "hot," if you have too rich a fuel mixture or worn rings and valve guides, or if wrong ignition timing or incorrect coil polarity is causing problems

By George Galster Service Manager, Champion Spark Plug Co.

SPARK PLUGS often get blamed for troubles arising from other causes. Mechanics should know how to "read" a plug to find where the trouble is located.

One point often overlooked is the question of heat range (Fig. 1). "Cold" plugs are those with short insulator nose. It doesn't take long for the heat to travel up the insulator to the point where contact is made with the metal shell. At this point the heat dissipates rapidly. The longer the insulator nose, the longer it takes the heat to travel to the point of contact with the metal shell. . . . So the longer the insulator nose, the hotter the plug.

How then do you read a plug

to spot a too hot or too cold condition—or some other trouble? Let's start with a healthy plug (Fig. 2). You can expect to see a light tan or brown colored insulator with a minimum of combustion deposits. No abnormal burning of electrodes will be noted. Rate of gap growth will be about 0.001-in. or less per 1000 miles of operation. Such a plug can be cleaned, regapped and reinstalled with satisfactory results.

Carbon deposits may be found (Fig. 3). This causes hard starting and occasional misfiring. Generally it is caused by the spark plug being too cold, can be corrected by using the next hotter type. Dry black deposits of this nature might also be formed by overly rich carburetion.

Operating with too rich an air/fuel ratio does cut

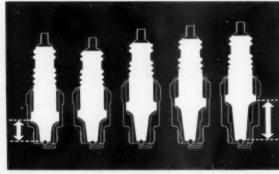


FIG. 1. Good place to start is to see if spark plugs being used are too "hot" or too "cold. Rule is: The longer the insulator nose, the hotter the plug; since ignition heat has to travel further before it's dissipated through plugs metal shield into the engine block

spark plug mileage. From a survey of typical startstop delivery operation, it was found that a 14 to 1 air/fuel ratio permitted 3000 miles between spark plug cleanings as compared to 2000 miles with a 12½ to 1 ratio.

Wet, oil deposits (Fig. 4) are also encouraged by plugs running too cold. This condition also can be due to excessive oil entering the cylinders past worn piston rings or excessive valve stem guide clearances.

Such oil fouling of spark

plugs may occasionally be found in new engines during break-in operation. It always has required some time for new piston rings to wear in properly for normal oil control. However, break-in fouling FIG.
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FIG. 2. Plug after normal use should have good electrodes, few deposits, tan or browncolored insulator



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FIG. 4. Wet, oily deposits also come from too "cold" a plug as well as excessive oil in cylinder from worn rings and valve guides

FIG. 5. Excessive electrode we a r and burned insulator tip mark an overheated plug. It can be caused by use of a too "hot" spark plug



is more common with present day engines largely because of short-stroke engine design.

Other factors being equal, modern engines may require twice as long to achieve normal oil control as would engines of only a few years ago. In such cases, do not substitute hotter plugs. Rather, plugs should be properly degreased and lightly cleaned with abrasive, then reinstalled for continued use. Increased traffic congestion in many areas also prevents proper "exercising" of new engines so periodic cleaning of spark plugs is desirable for peak engine performance.

An overheated spark plug

(Fig. 5) can be identified by excessive wear of the electrodes and by a white and burned appearance of the insulator firing end. Such burning can be largely relieved by substituting the next colder spark plug. However, there are many engine adjustments which could encourage burning that should be considered before assuming that the spark plug itself is at fault.

Over-advanced ignition timing affects both plug and temperatures and power output (Fig. 6—see next page). Notice that timing advanced a few degrees beyond the manufacturer's setting sometimes produces a slight power increase.

This explains why so-called "power timing" methods are sometimes used by mechanics . . . And why drivers sometimes tamper with distributor settings after they have been adjusted in the shop. Adjusting ignition timing properly to the manufacturer's specifications can greatly increase the life of spark plugs, valves and other engine parts.

Ignition timing should be

double-checked after new breaker points are installed or point spacing adjusted. Also, distributors should be checked periodically on a test stand to assure correct automatic advance.

Excessive wear in the distributor bushing or in the drive train can cause vibrations within the distributor which affect timing. It is good practice to slowly accelerate the engine while using a timing light, checking for fluttering or fanning of the timing marks at any speed. If this erratic movement covers more than 3 deg on the flywheel or vibration damper, distributor replacement or overhaul is recommended.

On vacuum-operated breaker

support plates, breaker point spacing can be changed at higher speeds by tilting of the plate. This condition can affect ignition timing and should be checked by means of a dwell meter or a distributor test. Remember a change in dwell of 5 deg over the speed range will change timing a like amount.

Knocking or detonation can further boost temperatures into the dangerous range. Detonation caused by over-advancing timing, poor quality fuel and other reasons rapidly increases temperatures

(TURN TO NEXT PAGE, PLEASE)

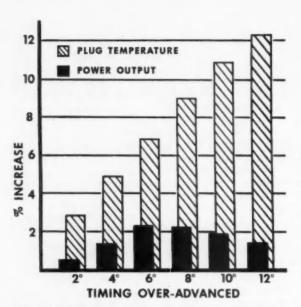


FIG. 6. Timing advanced a few degrees beyond manufacturers' settings can produce a slight power increase. It's usually accompanied by a temperature increase that shortens life of spark plugs, valves, other engine parts

... "Read" Your Spark Plugs

Continued from page 83

several hundred degrees, eventually pushing spark plugs and other engine parts to near pre-ignition limits.

Adjusting ignition timing on the basis of audible knock has long been popular. Modern combustion chamber design, however, may permit considerable knocking to actually occur before the sound becomes noticeable. For this reason, manufacturers warn against setting ignition timing by this method as engine damage often results.

Carburetion also affects spark plug temperatures and power output. Excessively lean mixtures should be avoided because of the greater tendency of lean fuel to detonate.

Spark plugs themselves do not produce a high voltage charge. They can, however, temporarily cover up needed adjustments or replacements in the ignition system. For example, burned or pitted breaker points, a faulty condenser, a weak coil or worn ignition cables can reduce voltage being supplied to the spark plugs. In these cases, new plugs produce only a temporary improvement in operation.

Induced leakage or "crossfire"

has become an important factor in modern engines because higher compression ratios have increased sparking voltages. Such leakage between ignition cables does not depend on insulation. It's caused by cables bunched closely together and running in parallel.

Coil polarity is another factor often overlooked. Polarity refers to the direction of high tension current flow. It should be negative at the spark plug terminal.

Recent studies indicate that when polarity is reversed, voltage required to fire a spark plug may increase as much as 35 to 45 per cent. This can cause rough idling and misfiring during acceleration and at high speeds. Perhaps as high as one out of four trucks, tractors and industrial engines in use have this unsuspected cause of "spark plug trouble."

While polarity can be reversed by improperly installing a battery, it is almost always

traced to reversed primary leads at the coil.

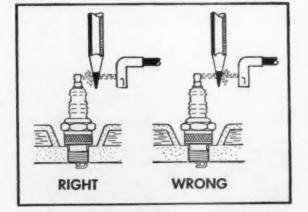
How can correct polarity be determined? Many coil testers have provisions for checking polarity. Ordinary high tension voltmeters also can be used by grounding the positive lead and touching the negative lead momentarily to the spark plug terminal. If polarity is correct (negative) the needle will swing up-scale. If the needle moves down-scale,

however, the coil leads sould be reversed.

Another method is to hold the ignition wire about ¼ in. away from the spark plug terminal with the engine running. Insert the point of a wood pencil between the plug and wire (Fig. 7).

If the spark flares or feathers with a slight orange tinge on the spark plug side of the pencil, polarity is correct. If the spark flares on the wire side, coil connections should be reversed.

FIG. 7. Often unsuspected, one cause of spark plugs misfiring is incorrect coil polarity. It can be checked easily with a voltmeter or using a pencil as shown below. Most often it's traced to reversed primary leads at coil



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How much are recurring equipment

failures costing you? Have you figured out recently the costs of breakdowns that might not have happened had your mechanics and foremen diagnosed the causes of troubles that pop up again and again?

Many operations don't spend the time it takes to make accurate diagnosis of why parts fail, but they pay for it in additional time and parts on the new failures. We find many operations, for example, that permit mechanics to replace worn or broken parts on their own—without reporting their condition to those responsible for overall costs.

The "time saved" in bypassing the foreman or the maintenance superintendent is costly. The condition that contributed to the original parts failure is pretty apt to do it again in a very few operating hours.

Take a carburetor flange that

has cracked prematurely (and any break is considered premature). Do your mechanics replace such a unit without reporting it to their supervisors? Do they install a new unit without trying to determine the cause of the failure? Such a flange failure may be the result of improper torquing of the mounting bolts, overheating of the engine or possibly improper bracing. We know of cases where braces have been removed in order to expedite air cleaner service.

It's up to the maintenance head to look for this type of trouble if he is to prevent recurring failures. You will make money by snooping around the scrap baskets—determining how some of these parts failed. Have you examined your scrap lately?

How do your maintenance costs

compare with that of a few years ago? Are you paring down the cost of operating heavy equipment by taking advantage of the improved designs built into them? Or are your methods geared to last decade?

You can't compare prices with yesterday, any more than you can compare your maintenance costs with those of twenty years ago, For example, in 1933 you could have bought one of the more popular cars for \$460, the engine selling for around \$90. Today we pay \$3000 for that car, and the engine will cost \$360. A similar comparison can be made on heavy machinery.

With this idea in mind

Caterpillar Tractor discusses various phases of maintenance requirements in relationship to the ultimate in equipment performance. Operating costs, according to a recent paper, have a major effect on the balance sheet—profit or loss. All but one of the items which make up total operating costs are fairly well defined—Purchase price, depreciation, parts replacement or repair due to normal wear, fuel and lubricants and operating labor.

The variable figure which cannot be estimated—sometimes not even computed—is the cost of premature wear or damage to one or several associated parts because of neglect. In addition to the cost of the repairs, we must add the loss in production because of down time.

Improvements that have been built

into the tractor were put there by the manufacturer because he believed that eventual usage would place the tractor under conditions far from the ideal. The operator may be inexperienced. Maintenance people may handle their work—adjustments and lubrication—on an "if and when" basis.

We talk a lot about equipment maintenance. Anyone who knows equipment stresses the importance of keeping it in condition to operate at peak performance. But what about the tools that are used to maintain this equipment? They too require periodic attention to keep them useful and accurate.

Take electrical testing instruments.

Far too often they are pushed to the far end of the shop where they collect dirt. Any old parts and supplies are piled on them. Delicate instruments get bumped. Results is they either fail to work or give inaccurate readings. And the end result is improper tolerances in areas where you need precision if you are to rebuild all the horsepower originally built into the machine.

Calibration of such units as ammeters, voltmeters and manometers should be checked frequently. Precision measuring instruments should be calibrated against master units at regular intervals if engine adjustments are to be held to factory tolerances. Such tools as jacks and hoists, power rams and compressors, air wrenches and electrical tools require cleaning and lubrication. Then they can be expected to do their respective jobs faithfully.



Like the Army, Utah's equipment spreads have bulletin boards to pass along the latest word on safety and PM

Sella FIELD DM

PM Time Is Not Lost Time

Don't let this happen to you! The contractor who does not insist on practicing planned preventive maintenance will soon find himself at a double disadvantage. Not only will his machines deteriorate, but so will his operators. Sloppy maintenance begets sloppy operation.

As for the amount of time it takes to give equipment the care it needs, it's minor. It is not the time spent in planned PM that chews away at the profits. Rather it is the time lost by machines on the deadline . . . and by other machines idled through breakdown of one key rig.

Keep your maintenance up and your profits will follow it.

HOW DO YOU sell the importance of preventive maintenance? Once Utah Construction Co., San Francisco, Calif., developed its new program (Dec. '58, page C2), it found it had to take steps to be sure both its maintenance men and its equipment operators would "buy" it.

It's a problem faced by many a construction fleet. No matter how effective a PM program you set up, it's no good unless everybody understands it and gives it full support.

When your equipment is spread

arcund the countryside at several different projects, the problem becomes a little tougher. Utah Construction found one effective answer in the use of field bulletins—to be posted on bulletin boards.

Utah's are bulletins with a difference. They take into consideration the specific interest of the people they are addressed to. For example, project superin-

Introducing the PM Program

Utah Construction Co. has worked out a well-organized program to make sure that each of our shovels, tractors, trucks and supporting equipment gets proper maintenance.

This maintenance program is rigidly enforced because Utah Construction is convinced it pays off many times in cost.

However, it takes a seasoned Master Mechanic plus PM checkers to serve as watch dogs. It is our job to anticipate trouble before it happens.

In the field, the Master Mechanic should have plenty of authority. Utah Construction has found that job superintendents intent upon pushing for maximum production sometimes keep a rig working when it should be pulled out of line and repaired. A few extra loads a day cannot pay for a blown tire, broken shaft or damaged engine.

Therefore, the Master Machanic has full authority to shut down any piece of equipment he sees fit.

Let us all look for danger signs and stay one jump ahead of trouble.

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tendents usually keep their "big" eye on production. Daily quotas for dirt moved, rock fill, scraping, etc., are the yardstick. As a result, they naturally tend to resist pulling a piece of ailing equipment off the line. They feel that a couple more loads won't hurt.

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When this gets to be the

deciding factor, overloading and equipment abuse soon shows up in the maintenance records and cost sheets.

So, Utah's first step was to get cooperation from all the people involved. When the new PM program was ready to go, it called in everybody—superintendents, project managers, master mechanics, traveling equipment superintendents—everybody on the team.

One principle laid down at

this meeting: Master mechanics were authorized to pull off the line any piece of equipment needing repairs. This was seconded by making them responsible for furnishing adequate equipment (drawing from the headquarters pool) so production goals could be met.

Space permits showing only four examples of the bulletins here. You'll find you can adapt them to your operation. Note how each is slanted to a specific group—relates the maintenance problem to a particular interest.

Trained Operators Cut Costs

This is true of every piece of equipment. Better care—both in operation and maintenance—will postpone the day of junking.

More important, better care will certainly reduce those unpredictable and unplanned downtimes that "louse-up" a job production schedule.

Faulty operating procedures by untrained men are one of the main causes of equipment breakdowns. It is not just the equipment abuse that causes trouble. The untrained operator is not alert to the many minor warning signals that can be seen, heard or felt—which often precede serious breakdowns. The competent and conscientious operator who heeds these warning signals can help prevent much damage.

A good operator has his finger on the pulse of his contractor's equipment at all times.

Bulletins are aimed at a specific audience. For example, bulletin at far left gives the project superintendents several good reasons for pushing preventive maintenance

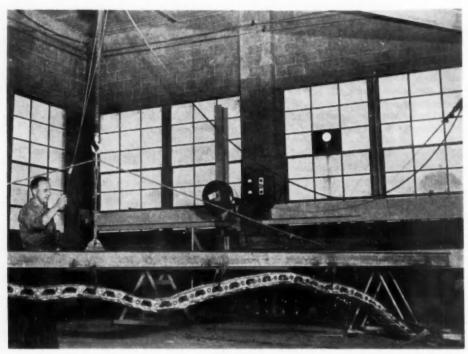
Next bulletin was the first one issued. It gives master mechanics the authority to pull equipment for maintenance

Bulletin below left is addressed to equipment operators, tells them what their interest in the new PM program is

Ten commandments for diesel maintenance is addressed to mechanics, gets attention and chuckles . . . and results

10 Commandments for Diesel Maintenance

- Thou shalt keep thine engine clean and in adjustment that thy life in its company shall be long and that the owner shall increase thy pay.
- Know thine engine and all its parts and functions, else thou shalt be in some unhaly spot.
- Be not wise in thine own conceit. Remember the factory instructions and keep them holy, lest repairs be thine undoing.
- 4. Be not loose in thy jaw hinges for no one man knoweth all about diesels. The truly wise absorbeth much knowledge from factory manuals.
- For all things in this life that thou desireth, thou shalt pay plenty and also for the wisdom of experience. Advice from the multitude costoth nothing and is usually worth just that.
- 6. In the books thou mayest read "what" to do and "when", but only the voice of experience may tell thee "why" and "how", else thy reading of "what" and "when" shall have done you no good.
- 7. God maketh the earth to rotate endlessly without bearings or oil, but not thy diesel.
- 8. Curse not thine engine when it turneth not. Curse rather thine own stupidity.
- Steam engines and gasoline engines may long turn over though sloppy. A diesel not so. With gages and mikes be thou ever busy.
- 10. The Eternal Eye watcheth universal operations, but thou may not ask it to watch thy diesel. Thine own vigilance is the price thou payest for thy job.



Overhead hoist and I-beam rig speeds track handling

How to Hard Surface Tractor Tracks

In this article, Lincoln Electric's Charles G. Herbruck continues to show how submerged arc hard surfacing can save you money. Last month, he described how to prepare for hard surfacing and the rebuilding of idlers and rollers (Dec. '58, pages C6 and C7). This article applies the process to tractor tracks. Next month, Herbruck tells how to rebuild crusher rollers.

Welding Procedures

	Link Width (in.)				
	11/16 to 11/4	11/4 to 11/2	13/4 to 21/8		
Number of layers. Welding current* Amp. Volts	2 400 28-29	2 450 28-29	2 450 28-29		
Electrode size: DC- DC+ or AC Travel speed* (in, per min) For tractor models	5/32 1/8 18 D4, HD8, T6, T9	5/32 1/8 15 D6, HD7, HD9, TD14A	5/32 1/8 18 D7, D8, HD10, 14, 15, 19, 20, TD18A		

^{*-}Make minor changes in current and travel speed to obtain exact bead size desired.

TRACTOR TRACKS wear severely in service. Rebuilding and hard surfacing them with automatic submerged arc hard surfacing, economically restores them to original size. Here is how it's being done.

Fixtures for welding tracks or rails have a channel trough in which the tracks are clamped during welding. On some, the sides of the trough are permanently attached. On others, the sides are put on during set-up. The welding head rides a carriage that moves over the work. Some fixtures use two heads instead of one. Power source is a 600-amp motor-generator.

Each track or rail is made up

of a series of links. Most are medium carbon steel

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forgings. They are induction hardened on the wearing surfaces. Tracks are ready for rebuild when this hardened area wears away. Some links are heattreated low alloy steel. They are harder than the worn medium carbon links.

Prepare track for the job with a thorough cleaning. Carefully examine it for flaws such as cracks or areas of spalling. Remove or repair links with flaws.

To set-up the work, place the track in the trough, pull it tight, and line it up with the travel beam. Block it between the sides of the trough and fasten it securely to the bed. This prevents motion during the hard surfacing operation. Then check to be sure each link is properly grounded.

Next fill the trough with fused flux slag. Cover with a layer of new hard surfacing flux so that the tops of the links are just exposed through the flux. This loose flux supports the molten slag during welding, keeps it from spilling off the sides of the links.

Pre-heating differs for the two

types of steel. Medium carbon links are brought to a temperature of at least 70-80 deg F before welding. A temperature of 100 deg F is even better. While room temperatures are normally about 70-80 deg F, this does not always mean the tracks are this warm. It is best to check before welding.

Heat-treated low alloy steel links and previously hard surfaced links with surface hardness of 45-50 Rc require a 400-500 deg F preheat.

Manually weld all the links in each side together so there is a continuous metal path from one end of the track to the other. Using the appropriate sequence and welding procedures given in the chart at bottom left, deposit continuous beads on the links.

After welding, cool track to room temperature in the flux filled trough. Then remove it, cut welds between the links.

In another welding method the space between the links is filled with flux. Using the same sequence and welding procedures, put one bead on each link—stopping and starting the weld on each link. After the first bead has been put on all links, repeat the procedure with the second bead.

Continue this sequence until the entire track has received the total required number of beads. Cooling and removal is the same as given above.

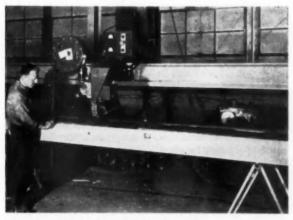
A third welding procedure requires use of some special equipment. It is similar to the second process, except that the welding head moves continuously over the track while the arc automatically starts and stops on each individual link.

This automatic operation requires high frequency starting and special cams to trigger arc starts and stops. Once adjusted, operation for each pass is fully automatic.

Beads are put on in the sequence shown at right. Beads A, B, C make one complete layer. Sequence is repeated for succeeding layers until link reaches finish size.

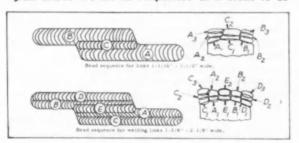


Once track is positioned in welding channel, clamp it down tight to keep it from moving during hard surfacing



Set-up includes filling channel with slag and flux to support molten weld metal. Next is actual hard surfacing operation with welding head riding beam above track

Bead sequence follows alphabetical order shown in diagram below. It's not as complicated as it seems to be





One way to cut down time in turning pins and bushings is to use a portable hydraulic track press in the field



End collar bolts often work loose in rock and other rough jobs, need tightening more often than in normal usage

Let's Talk Track Maintenance

TRACKS SHOULD be inspected daily for proper adjustment. If tracks run too loosely, they sag between the points of support. This additional movement causes wear between the contact surfaces of pins and bushings.

A tractor with loose adjustment driven at high speeds can throw its track. This is expensive—both from the damage to its parts and from the downtime involved.

Tracks that are adjusted

with a wrench are rarely overtightened. On tractors equipped with hydraulic track adjusters, the opposite is true.

All that is needed for hydraulic adjusters is a few shots from a lever-type grease gun. The hydraulic pressure puts the track in tension. A few "extra" shots, and the track is overtightened.

Overtightened tracks cause

overheating of pins and bushings. These parts can become hot enough from friction to temper the heattreated metal and reduce its hardness. Loss of hardness increases wear, cuts service life.

Many tractors have two-position idlers that may be placed in a high or a low position. For most applications, they should be in "high." However, when tractor is equipped with heavy front-mounted equipment, change the idlers to low position.

When the tractor is equipped with a bulldozer, for example, better balance is attained with the idlers in "low." Track shoes under the idlers are then in line with the shoes under the rollers. Track shoe grousers, however, are subjected to greater wear since there is a scrubbing action on each grouser as it passes under the idler.

Lubrication is a major part

of any maintenace program. Manufacturers contin-

ually work to simplify lubrication requirements. There is always risk in establishing any lubrication interval. If they are too frequent, there is always danger of overlubrication. Blown seals and damaged rollers usually result. If intervals are too far apart, there is the tendency to forget about those parts.

Most manufacturers agree that a middle-of-the-road lube recommendation is best. There is only one general rule for track roller lubrication. . . . Follow the manufacturer's recommendations.

Contaminated lubricants, fittings

that aren't really clean before being used, overlubrication or underlubrication are major causes of short service life. When a hand operated grease gun is used to apply lubricant to roller and idler bearings, apply only the amount needed to feel a slight additional resistance on the gun handle.

Pumping after this resistance is felt creates enough pressure to damage the seals. If pressure can't be built up, it usually indicates a damaged seal that should be replaced immediately.

Power-operated pressure lubricant

dispensers deliver lubricant in such high volume and pressure that a relief valve should be installed in the lubricant line to prevent seal damage. Be sure valve has proper initial pressure setting. It's a good idea to periodically recheck the setting. Many rollers have gone without lubricant because a relief valve was unseating at too low a pressure.

Under no circumstances should pins and bushings be lubricated. Dirt combined with oil makes an excellent grinding compound. Lubrication of these parts greatly increases the wear rate.

Daily inspection should include

a critical look at track hardware. Most track parts are subjected to continued stress and shocks. Loosened

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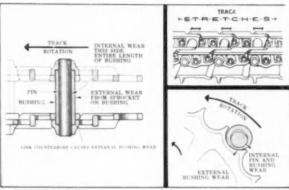
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Left. Here are areas where pins and bushings usually wear. Above right. As pins and bushings wear, track stretches enough to need adjustment. Below right. As sprocket turns, it wears pins and bushings on one side. Turning them 180 deg doubles their life, says Kingsley

SECTION OF LINK-SUBJECT TO SIDE LOADING

TRACK ROLLERS RIDE ON ONE SIDE OF LINK ASSEMBLY

NOTE HOW SPROCKET CAN GOUGE THE SIDE OF A LINK

Match track width on all scrapers used on a job. View shows wear points on larger shoes when following cut of narrow shoe equipment. You can use inside offset shoes

nuts and bolts should be retightened immediately to prevent shearing, loss or damage to the part they secure.

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A misaligned idler causes wear on the pilot rim section of the idler, on the sides of the track links and on the roller flanges. On most tractors, it is a simple matter to adjust idler alignment with shims located beside the idler bearings.

A track roller frame member that has hooked an obstacle and bent slightly causes track misalignment. If the idler cannot be adjusted to proper alignment, frame members should be straightened or replaced before they cause serious damage to other track parts.

Turning of pins and bushings

helps reduce replacement costs. As they wear, the track becomes longer and adjustment is necessary. When the limit of track adjustment is reached, pins and bushings should be rotated 180 deg. This should nearly double their service life.

The master pin and bushing should not be used as a guide to determine wear on the other pins and bushings. Wear at this point is more rapid.

Adjacent pins and bushings,

extending along the track on either side of the master pin for half the circumference of the sprocket usually exhibit more wear than the others. Experience has shown that periodic replacement of the master pin reduces wear on the close by pins and bushings.

Never operate a tractor with bushings that are broken. This results in accelerated wear to other track parts. Also badly worn pins and bushings cause jumping of track and rapid wear on sprocket teeth.

All track rollers under a

tractor do not wear at the same rate. It is profitable to switch rollers in the same manner as tires are switched on automobiles. This distributes the wear This is the second part of "Let's Talk Track" by Thomas C. Kingsley, Service Dept., Caterpillar Tractor Co. First part of this timely article on how to get longer track life appeared in the December issue, page C 5.

and extends the service life of the roller group. It is best to change the position of rollers about midway in their normal service life. Sprockets and idlers also can be switched to equalize wear—at the midpoint in their service life.

To determine wear between links and rollers, check the clearance between the roller flange and the link pin boss. Dealers should be consulted for maximum wear limits so they can be economically rebuilt.

Reconditioning of track and

its related parts is a sound investment. When rebuilt before they have reached the stage where it is uneconomical do so, these parts give good performance.

Track rollers that show excessive wear or have enlarged or bellmouthed bores, distorted cap-screw holes, loose rims, or broken flanges can make rebuilding an unsound investment. In such cases, a new part should always be installed.

In rebuilding, roller shells

should be well cleaned. The welding wire used should meet as close as possible original part specifications for hardness and impact resistance.

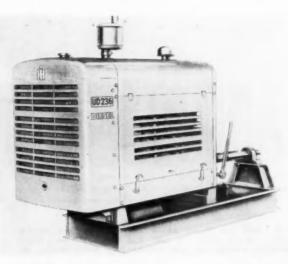
Crawler tractor manufacturers have developed standardized recommendations for rebuilding track parts and instituted dealer training programs. This helps assure that reconditioning work meets original part specifications.



IHC Introduces Two Diesels

THE INTERNATIONAL HARVESTER plant at Melrose Park has introduced two new diesel engines of 75 and 90 hp for the industrial field. Both the Model No. UD-236 and the Model No. UD-282 are direct-start engines with glow plugs for each pre cup.

The UD 236 has a bore of 3 11/16 in. and a stroke of 3 11/16 in., develops 75 hp at 2400 rpm. The UD-282 is a 90 hp unit with a bore of 3 11/16 in. and a stroke



of 4.390 in. Both engines have a 17.6 to 1 compression ratio.

These two diesels are

interchangeable with carbureted engines both in power and dimensions. They feature replaceable cylinder sleeves, improved fuel injection systems and better operating economy.

Nozzles are American Bosch, and the distributor-type pump is a Roosa-Master type. IHC's conical pre-combustion chamber and conduction-cooled three-ring piston design are used in these engines.

Caterpillar Has New Scrapers

TWO SCRAPERS are now available for service with the Caterpillar Model No. DW20 wheel tractor. One is a 24-yd struck-capacity scraper, Model No. 482 Series B. The other is the 18-yd Model No. 456 scraper.

The 482 incorporates a number of features designed for long service life. Bowl lift sheaves are located in the draft frame spreader tube. The bowl lift cables are attached directly to the bowl sides—a change made advisable by the large capacity of the scraper. This innovation gives maximum protection from dust and fouling of the bowl lift sheaves and cables. Sealed sheave bearings are used throughout.

. . . . and a New Portable Welder

A PORTABLE twin arc-welder has been announced by Engine Division, Caterpillar Tractor Co. The welder, equipped with either skid base or running gear, uses the Cat Model No. D311 (Series H) diesel engine and two Lincoln Electric welding generators.

The generators each have a rating (NEMA) of 300 amp at 40 volts for simultaneous operation of two arcs. For parallel operation, the twin arc-welder is rated at 600 amp, 40 volts. Current range of each generator is 60 to 375 amperes.

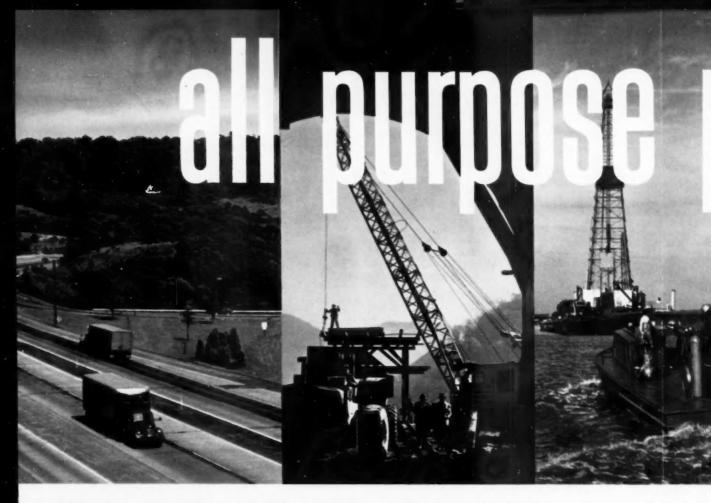
Two sets of generator controls allow welding at different voltages, amperages and polarity at the same time. This permits precision adjustment for any type or size arc throughout the current range.





A whole new concept in power

all purpose power line



GM Diesel combines 8 New Basic "V" and "in-line" engines with its

To help industry fill its power needs, GM Diesel engineers have developed the most comprehensive power concept since they pioneered the small 2-cycle Diesel.

Using only 3 cylinder sizes, they have more than doubled the number of basic engines – vastly increased the horsepower range – yet maintained the family relationship and parts interchangeability for which GM Diesels are famous.

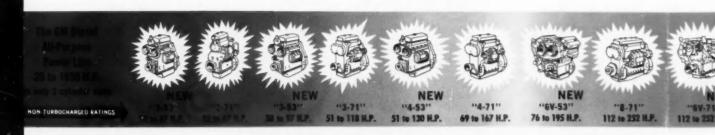
Each engine features the ultimate in compactness, light weight, high efficiency, durability and inexpensive maintenance.

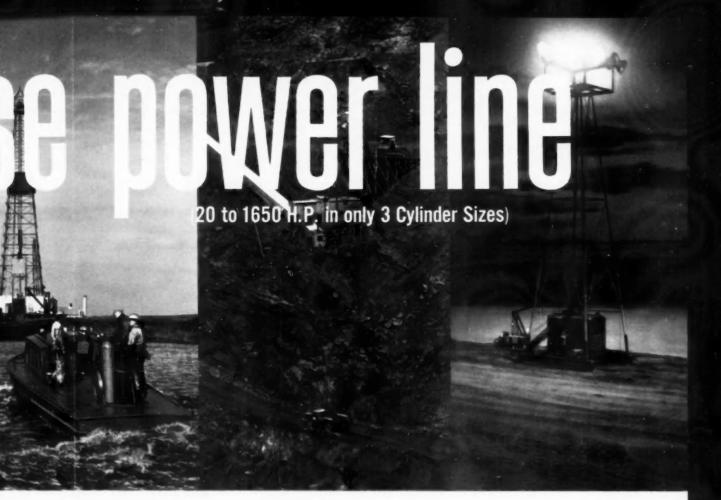
Basing their design on that of the versatile and capable GM Series 71 Diesel, GM Diesel engineers have created 8 new basic "V" and "in-line" engines which will add vastly new power coverage to the present Series 71 and 110.

First, the new Series 53 Diesel—comprising four basic "V" and "in-line" engines—is a smaller, more compact version of the famous "71."

Here, at last, in the Series 53, are Diesels which cover the lower horsepower ranges as never before. They hurdle the barriers which have limited the use of Diesel power in a whole host of applications. They offer new opportunities for Diesel power to farmers, boatowners and industrial users by making available GM Diesels particularly suited to their needs. They will pay for themselves amazingly fast when they take over from gasoline engines.

Four new "V-71" engines complete the additions—widen the power range of the "in-line" 71 Series—set new standards for low weight and small size per horsepower. These "V-71"





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h cover the lower irdle the barriers n a whole host of r Diesel power to making available is. They will pay take over from

itions-widen the new standards for r. These "V-71"

engines bring far more power than ever before possible to the big brutes of the construction, mining, petroleum, logging and marine industries-up to 1650 H.P. when turbocharged.

Production has started and complete programming has been established on all new engines. Non-turbocharged engines will be available first, followed later by Turbopower models to complete the power range.

So-now more than ever before, it pays to standardize on GM Diesel power. For whatever you want a Diesel to do, there's a GM Diesel to do it for you-faster, better, at less cost. Truly, here is a whole new concept in Diesel power the All-Purpose Power Line. Get the full story by writing GM Diesel, Detroit 28, Michigan.



DETROIT DIESEL ENGINE DIVISION. GENERAL MOTORS, DETROIT 28, MICH.

In Canada: GENERAL MOTORS DIESEL LIMITED, London, Ontario Parts and Service Worldwide

















NOW... A "Jimmy" Diesel for every kind and every size of truck, bus or taxi

- and see how new GM Series 53 and "V" engines compare in size with nearest Diesel competitor

NEW SERIES 53 "IN-LINE" -

-smaller Diesels millions can use

47 H. P. @ 2000 R. P. M. 97 H. P. @ 2800 R. P. M. 130 H. P. @ 2800 R. P. M.

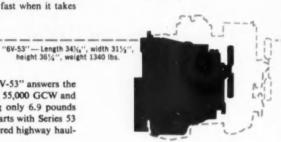
A scaled-down version of the dependable Series 71 GM 2-cycle Diesel-identical in design principles-the new "53" incorporates the time-proven features of patented GM unit fuel injection and uniflow blower scavenging in more compact, lighter-weight units. These spacesaving 2-, 3- and 4-cylinder engines open up new fields of Diesel usefulness in small trucks, buses and taxicabs, as well as in tractors, material-handling equipment and small boats. Put a Series 53 "Jimmy" Diesel to work. It will pay for itself amazingly fast when it takes over from a gasoline engine.



NEW "6V-53" --

-for space and weight-savings in shorter over-the-roads units 195 H. P. @ 2800 R. P. M.

Essentially two 3-cylinder banks in a "V" block arrangement, the new "6V-53" answers the need for a super-compact 175 to 195 horsepower Diesel for trucks up to 55,000 GCW and 30- to 50-passenger coaches. Only 341/6" in over-all length and weighing only 6.9 pounds per horsepower (a new low), it features maximum interchangeability of parts with Series 53 'in-line" engines-permits design of new shorter, lightweight Diesel-powered highway hauling units.



SERIES 71E "IN-LINE" -----

-the proven economy engine of highway hauling 4-71E-145 H. P. @ 2100 R. P. M. (Turbopower-171 H. P. @ 2300 R. P. M.) 6-71E-217 H. P. @ 2100 R. P. M. (Turbopower-236 H. P. @ 2100 R. P. M.)

"6-71E"-Length 54%", width 35%", height 49%", weight 2080 lbs. Lightweight aluminum version 1670 lbs.

These great "71E" and "71T" "Jimmy" Diesels have proved themselves the most outstanding, most economical performers on the highways-producing the lowest-cost miles in Diesel history. In many fleets these rugged engines deliver up to 7 miles per gallon-as many as 300,000 miles without overhaul. And when overhauls are needed, they cost far less than for other Diesels. Lightweight aluminum version of "6-71E" weighs up to 690 lbs. less than competitors in the 217-h.p. range.



NEW "V-71" -----

-the only 217 h. p. Diesel that really fits into 48° b. b. c. truck-tractors. 69-71-217 H. P. ⊜ 2100 R. P. M. 89-71-290 H. P. ⊜ 2100 R. P. M.

Over a foot shorter and 200 pounds lighter than "in-line" Diesel sixes of equivalent horsepower, this new GM "6V-71" will inaugurate a new era of efficiency and economy in shortwheel-base C.O.E. tractors. The new "8V-71," producing 290 H.P. without turbo-charging, will "step up the horses" in big logging trucks, on- and off-the-highway operations and large passenger coaches. All of the economy improvements made on Series 71 engines in the past 20 years are incorporated in these new engines. Most parts completely interchangeable between the "V's"-maximum interchangeability with "in-line" Series 71 units.



GM Diesel Send me detailed information on new GM All-Purpose Power Line for trucks and buses. I am interested in new Series 53 (.....), Series 71E (.....), new "V-71's" (.....). STREET ADDRESS CITY......ZONE.....STATE

In Canada: GENERAL MOTORS DIESEL LIMITED, London, Ontario

GENERAL MOTORS, DETROIT 28, MICH

In Canada: GENERAL MOTORS DIESEL LIMITED, London, Ontario Parts and Service Werldwide

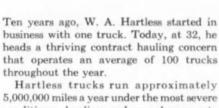
Specifications subject to change without natice

Litho U.S.A.



"Toughest operating conditions possible-yet Phillips 66 HD Motor Oil gives full protection!"

—W. A. Hartless, Contract Hauler, Richmond, Virginia



Hartless trucks run approximately 5,000,000 miles a year under the most severe conditions—hauling sand, gravel, aggregate and fill dirt. "Pit hauling is tough on engines. And with the powdery grit that can get into engine parts you need every protec-

tion possible. We are completely satisfied with the protection we're getting from Phillips 66 Heavy Duty Motor Oil." Mr. Hartless also uses Phillips 66 gasoline, greases, Diesel fuel and truck TBA items exclusively.

Get the best long term performance out of your fleet. Depend on the outstanding products and service offered by your Phillips 66 Distributor. Call him today for complete details.





SALES OFFICES:

Amarillo, Tex.—First Nat'l Bank Bldg.
Atlanta, Ga.—1428 West Peachtree St.
Station "C" P.O. Box 7313

Chicago, III.—7 South Dearborn Minneapolis, Minn.—215 South
Denver, Colo.—1375 Kearney St. Omaha, Neb.—3212 Dodge St.
Des Moines, Iowa—6th Floor, Hubbell Bidg.
Raleigh, N.C.—401 Oberlin Road

Houston, Tex.—6910 Fannin St. Indianapolis, Ind.—3839 Meadows Drive Kansas City, Mo.—201 E. Armour Blvd. Minneapolis, Minn.—215 South 11th St. Omaha, Neb.—3212 Dodge St.

Salt Lake City, Utah—68 South Main St. Louis, Mo.—4251 Lindell Blvd. Spokane, Wash.—521 East Sprague Tampa, Fla.—3737 Neptune Street Tulsa. Okla.—1708 Utica Square Wichita, Kan.—501 KFH Bldg.

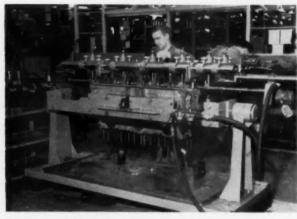
Part of the W. A. Hartless fleet, shown at West Sand and Gravel Co., one of Hartless' biggest customers.



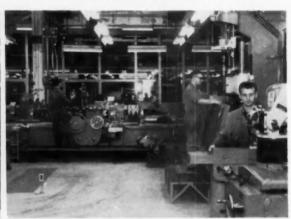
Special shop-built air test benches check all types of bus compressors under normal and full-load conditions



Diesel fuel pumps and injectors get the full treatment in this dust-proof and air conditioned overhaul center



Line boring main bearings is always a trickly operation, but machines like this one eliminate most of guesswork



While every fleetman knows crankshaft grinding is expensive, it does pay off when done in sufficient volume

Here's a Look at Montreal Transit's

It can handle almost any job short of actually building a bus, is clean and

LAST STREET CAR in Montreal hit the junk pile last October. Now it's all bus-1950 of them.

Making a switch like that requires a lot of advance planning. Montreal's Transportation Commission began the job back in 1951. One important part: The shop facilities.

They decided on one master overhaul shop, several smaller district maintenance centers. There are 11 of these. They handle fueling, lubricating, washing, tire checks, minor repairs such as installing in-

jectors or carburetors. Major repairs and overhauls are done at the Cremazie shop-where the above photos were taken.

In the Cremazie shop almost any

job can be handled short of actually building a bus. A key device in the operations is a pair of control boards on which colored pegs represent buses-their histories and their mileage.

Miles run are reckoned by actual distance traveled

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COMMERCIAL CAR JOURNAL, January, 1959



All shock absorbers are rebuilt and tested. Some get a life-span work-out on this recording torture chamber



Brake drums and shoes are ground in pairs on these carefully matched machines to give longer brake lining life

Rebuild Shop

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well lighted as photos above show

on a trip rather than by speedometer figures. As the bus accumulates mileage, its peg moves down the big board so that a glance reveals when the bus is due for major inspection or overhaul.

Coordination of service between the Cremazie headquarters and the district shops is with a minimum of red tape. An operating garage might send in a defective carburetor, tagged with the date, vehicle number and fault. Cremazie's parts department, without asking questions, sends back a rebuilt one.



Biggest share of Montreal's fleet was built by Canadian Car. Many coaches have underfloor, horizontal diesels

If the defect is a major one the operating garage may call in, "We've got trouble on one cylinder—no compression." If the peg board shows that the bus is almost due for a major overhaul, it comes in—either immediately or within a day or two. If the vehicle isn't tagged for overhaul soon and appears to be otherwise in good condition, out go necessary parts.

The Cremazie shop is organized

according to department—such as electrical, body shop, production (where parts are either rebuilt or repaired). Each department has its own toolroom, its own specialists, and is sub-divided under various foremen. Each of these is responsible for the quality of the work done in his areas.

Items such as chromium plating, case hardening and spring work are farmed out to outside firms, but otherwise the garage does all its own work. This includes building-up worn parts by metal spraying, turning and finish grinding, crankshaft grinding, rebuilding and testing diesel injectors and pumps, all body work and upholstering.

Salvaging and rebuilding worn parts saves a million dollars a year, says Maintenance Superintendent Jack Brock.

Maintenance schedule, says Brock,

runs in multiples of 3000 miles for greasing, 6000 for oil change and minor inspection and 12,000 miles for major inspection. There is a more extensive inspection after 100,000 miles and usually a major overhaul and reconstruction job after 200,000 miles.

If at 12,000 miles, any major defect is found, it is immediately corrected. At 100,000 miles, Montreal's usual practice is to grind valves and do more work as needed, including partial body reconstruction if it seems advisable.

All buses are washed at least

once a week-ordinarily more often depending upon rain and mud conditions.

Montreal's buses as a rule run about 40,000 miles a year. On the average, this means each receives a "semi-major" every two years and a major every four years. Besides the mileage yardstick, a chassis dynamometer is used to check performance. Also there is a daily report on fuel and oil use. Knowing the average fuel consumption—6.5 mpg for diesels, 3.5 mpg for older gasoline-powered "trippers"—it is easy to note threatening trouble.

New Spicer Transmission System is Semi-Automatic

SPICER HAS introduced a new semi-automatic transmission system—the "Presto-matic." It eliminates the clutch pedal in heavy-duty trucks. Instead there is a touch-button control on top of the gearshift lever which engages or disengages the clutch. Fuel economy is not affected, says the maker. The driver still controls the gears, can upshift or downshift at his own choosing. The Prestomatic system is now supplied as a regular production option in all Diamond T diesels.

Smooth clutch engagement from

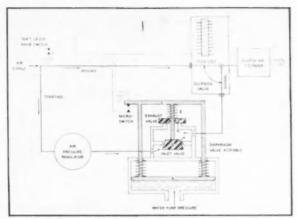
a standing start is automatic. A sensing mechanism synchronizes clutch engagement with the speed of the engine.

Here is how it works . . . clutch pedal and release yoke are replaced by an air cylinder and linkage which operate automatically on a pre-set engine rpm, or by remote control from the touch-button on the shift lever. With the vehicle in starting gear, acceleration automatically engages the clutch. When it's time to shift, the driver presses forward on the lower half of the shift lever knob which releases the clutch. The shift is then completed in the regular manner.

Air pressure holds the clutch

in disengaged position. As pressure decreases, clutch gradually takes hold. Clutch is fully engaged when air pressure reaches zero.

Water pressure from the cooling system actuates the diaphram valve assembly (see sketch) to disengage clutch for shifting to starting gear when vehicle is stopped. This assembly is the brain of the Presto-matic,



controlling clutch engagement in relation to engine speed.

When the vehicle is moving under normal operation, the inlet valve (D) is closed and exhaust valve (E) is open. Solenoid valve is in "normal" position with clutch air cylinder open to atmosphere.

To disengage the clutch

for shifting, the driver presses the shift lever knob which activates the solenoid valve to "energized" position. Air pressure moves directly to the clutch air cylinder and disengages the clutch so the shift can be made.

When the driver releases the shift lever knob, solenoid valve returns to "normal" cutting off air supply and exhausting air pressure through exhaust valve (F).

As vehicle slows to a stop, water pressure is reduced causing diaphragm (A) and bracket (C) to drop. This opens inlet valve (D) and closes exhaust valve (F) letting air supply move through air pressure regulator and diaphragm valve assembly to disengage clutch automatically.

Mack Introduces Two New Six-Wheel-Drive Models

MACK TRUCKS has two new six-wheel-drive trucks for medium and heavy-duty service over rough terrain.

The Model No. B-426S is for service in the 40-50,000 GVW class. It is intended primarily for dumper and mixer service where maximum traction is needed. This model is powered by Mack's Magnadyne gasoline engine, has constant velocity joints in its front axle drive.



The larger model is rated for

60-65,000 GVW. Called the Model No. B-8136SX, it is designed for use in heavy-duty, off-highway operations such as construction, logging and oil fields. This unit is powered by Mack's turbocharged 205 hp Thermodyne diesel, has a large-capacity Mack balanced bogie with a power divider-type inter-axle differential.



Front axle on this model is an original Mack creation used for many years on its military models. Front axle drive is handled through the steering knuckles utilizing two pairs of spiral beveled gears. Constant velocity joints are completely eliminated giving greater turning angles and longer life than the conventional system.

COM



AC and GENERAL MOTORS COMBINE TO BRING YOU

TOP-FLIGHT ENGINEERING . ULTRA MODERN LABORATORIES

THOROUGHGOING RESEARCH . CONTINUOUS TESTING

INTENSIVE QUALITY CONTROL

All dedicated to producing the finest



HOT TIP
COMMERCIAL
SPARK PLUGS

Here's the *real* story about why more and more truck fleets are changing over to AC!

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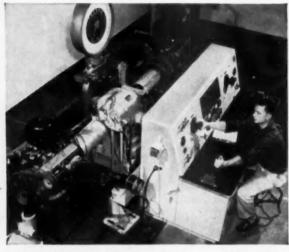
1959

SPARK PLUGS

benefit from these unequalled facilities



AC SPARK PLUG ENVIRONMENTAL research and testing supplement out-ofdoors work by using special chambers in which various conditions of altitude, pressure, humidity and temperature can be simulated. With such indoor facilities, weather can be made to order for immediate research study . . . the same kind of weather your own fleet encounters.



AC DYNAMOMETER FACILITIES are loaded with the newest, most modern equipment available. This setup makes it possible to run simulated road tests right in the laboratory. Stop-and-go . . . high-power, open road speed tests . . . the same type of load and road conditions truckers find in hill-country driving. Plugs are tested, proved and approved for any conditions you could encounter.



A TYPICAL AC LABORATORY at Flint, Michigan, where AC maintains complete metallurgical, ceramics and mechanical engineering laboratories devoted to spark plug improvement through research, and quality through control. The complete AC automotive engineering and research staff numbers more than 550 people devoted to the job of basic research to improve spark plugs.



FOR MOUNTAIN DRIVING TESTING, GM maintains a test site at Manitou Springs, Colorado, at fabulous Pikes Peak. Here operational tests are conducted on AC Commercial Spark Plugs that go far beyond the demands that will be made in normal usage. The use of such facilities help AC to build ever better products for you . . . result in better gasoline mileage, longer spark plug life.

TESTED BY TESTED AGAIN BY GM and proved daily...
in millions of vehicles*

COMMERCIAL CAR JOURNAL, January, 1959

COM



GENERAL MOTORS TECHNICAL CENTER, near Detroit, Michigan, is recognized by the automotive and allied industries as a monument to the industrial significance of the automobile, its design and its engineering. Here GM has

tests

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959

assembled, in personnel and in equipment, every resource for research and for testing—a magnificent supplement to AC's laboratories, and one that pays off for truck operators through improved efficiency of every component.



AT MILFORD, MICNIGAN, stretch out the many acres of the world-famous GM Proving Ground. GM was early to recognize the need for multiple-terrain testing of cars and trucks. Here all road conditions are duplicated and all sorts of road-testing carried on day in and day out, and 'round the clock. Tested at high speeds and low speeds, over millions of miles, AC Hot Tip Spark Plugs prove their better anti-fouling characteristics and longer life.



GM PROVING GROUND near Phoenix, Arizona—taking advantage of wideopen spaces, desert heat and sand conditions to augment the Milford operation. AC Spark Plugs are again a beneficiary, for the millions of test miles run at Phoenix put new and strenuous demands upon ignition. If even a tiny refinement can be made AC is quick to respond. You find the results of this test program in improved fuel combustion and better performance.

* 44 truck fleets – testing new AC Commercial Hot Tip Spark Plugs over a total distance of 2,260,000 miles – proved that new ACs give better performance, greater mileage, longer life than any spark plugs previously used.

ACTION

...the Spark Plug others follow!

FIRST with the stronger one-piece heatsealed shell construction.

FIRST in welded side electrode construction for better heat and electrical current conductivity.

FIRST to incorporate a resistor element for elimination of radio interference from the ignition system.

FIRST with fused metal-ceramic seal to stop center-wire compression leakage.

FIRST in the use of unglazed insulator tip to resist lead attack.

FIRST with the aluminum oxide insulator in the United States—a patented AC ceramic composition!

FIRST to use greater "scavenging" area between insulator and shell.

FIRST with the long, thin, recessed, quick-heating insulator tip—the AC Hot Tip—another AC exclusive!

FIRST with the copper-core electrode to improve performance under special high temperature operating conditions in commercial applications.



For more than half a century AC has been the Spark Plug others followed. The leadership established by AC when cars and trucks became a horse-replacing reality has never been seriously challenged by even the closest of imitators. This has remained true because AC Spark Plug engineering, research, testing, and manufacturing development has kept ahead of ever-growing engine demands.

Some two dozen automotive components bear the familiar AC initials, attesting to the fact that AC is not narrowly limited to spark plug manufacture. This wide industry interest enables AC to employ facilities it could not offer as a one-product manufacturer. AC, sharing some of its basic patents with others, pioneered and developed the kind of spark plug that modern high-compression engines demand. And, in addition, AC developed and still offers the exclusive Hot Tip design and the metal-ceramic center electrode seal which, with AC's heat-sealed plug assembly, completely solves compression leakage.

There's still more. You also get the tremendous advantages of General Motors' unequaled research and testing facilities. You can depend on AC to stay ahead in spark plug technology.

AC HOT TIP Spark Plugs are used in more new cars than any other brand, and are engineered for all makes of cars, trucks and tractors.

AC SPARK PLUG A THE ELECTRONICS DIVISION OF GENERAL MOTORS

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January News Roundup

ICC Sets the Pace

WASHINGTON, D. C.—When you're pushing safety, you have to be safe. Interstate Commerce Commission Bureau of Motor Carriers' passenger car fleet is. It just won second place for passenger cars in the Eastern region, Group two class of National Safety Council's Fleet Safety Contest.

Trucks Haul "Hot" Cargo

LISTERHILL, ALA.—"Hot" cargo in the form of molten aluminum goes by truck. Move is from Reynolds' plant located here to Ford foundry a quarter-mile down the road. Insulated "buckets" with 5000-lb capacity are used. It gives Reynolds a steady customer, saves the cost of making aluminum ingots and then remelting them.

Thruway Saves Mileage Tax

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ALBANY, N. Y.—New York's mileage tax does not apply to the 18-mile Berkshire section and 14 miles of the New England section (see below) of the New York Thruway, advises the

1958 Domestic Truck Factory Sales by G.V.W.

Month	6,000 lb. and less	6,001- 10,000 lb.	10,001- 14,000 lb.	14,001- 16,000 lb.	16,001- 19,500 lb.	19,501- 26,000 lb.	26,001- 33,000 lb.	33,000 lb.	Total
January	32,143 26,400	10,187 8,302	1,075 983	5,454 5,167	6,991 5,303	3,640	2,482 2,460	2,048 1,768	64,020 53,968
March	27,929 25,822 26,329	8,450 8,866 9,152	963 1,041 1,071	5,561 5,896 5,985	5,431 5,933	4,005 3,918	2,929	2,349	57,637 56,042 58,509
JuneJuly	25,241	9,120	1,236	5,976 5,039	7,061 6,275 5,393	4,182 3,674 3,211	2,236 2,028 1,911	2,488	56,019 50,454
August September October	21,788 14,377 27,585	7,374 5,329 8,296	752 833 635	4,024 2,960 3,111	5,619 3,484 7,013	3,637 2,913 4,000	2,016 2,383 3,033	1,840 2,153 2,133	47,030 34,232 56,905
10 Mos. 1958	251,891 371,533	82,744 110,846	9,177 25,124	49,193 96,757	58,493 43,711	38,824 37,417	23,647 28,647	21,867 26,379	533,836 740,414

Source: Automobile Manufacturers Association.

New York State Thruway Authority. Tax does apply on the following Thruway sections: New York City to Tuckahoe Rd.—4 miles, Elmsford to Tarrytown—1.5 miles, South Nyack to Spring Valley—6.1 miles, Williamsville to Harlem Ave.—6.1 miles, Niagara Section, Court St. to Porter Ave.—0.81 miles, Grand Island Section—5.1 miles, New England Section—1 mile. At Thruway's western end, tax is charged from Exit 61, Ripley, to Pennsylvania state line via Route 5—1.9 miles westbound, 1.6 miles eastbound.

Driver Safety Course

NEW ORLEANS, LA.—Harold Smith, director of the Institute of Driver Behavior (Dec. '58, page 5), concludes his sessions here Feb. 13, moves on to Jacksonville, Fla., Feb. 16-Mar. 20, and to Atlanta, Ga., Mar. 30-Apr. 24. For details, contact your local Ford Division district fleet manager.

January's Big Meetings

DETROIT—Society of Automotive Engineers, Annual Meeting and Engineering Display, Sheraton-Cadillac and Statler Hotel, Jan. 12-16.

DALLAS, TEXAS—American Road Builders Assn., Annual Convention and Exhibit, Dallas Memorial Auditorium, Jan. 19-22.

MIAMI BEACH, FLA. — Associated General Contractors of America, Annual Convention, Bel Harbour, Jan. 19-22.

HOLLYWOOD, FLA.—Truck-Trailer Manufacturers Assn., Annual Meeting, Hollywood Beach Hotel, Jan. 25-28.

CHICAGO—Private Truck Council of America, Annual Convention, Sherman Hotel, Jan. 29-30.

For other meetings of interest, see page 40 this issue.

Ashtabula Cargo to Grow

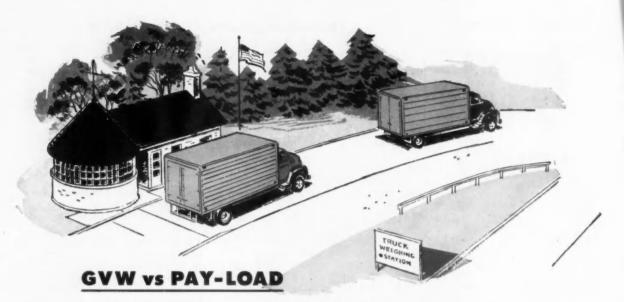
ASHTABULA, OHIO — Port officials here expect a boom in traffic when the St. Lawrence Seaway opens this year. The port handled about 12 million tons of bulk and general cargo last year. Private capital is developing a \$5 million port improvement project which is now in operation. Designed to handle both bulk and general cargo, the port will have excellent access to Southeastern Ohio when Ohio Route 1 is completed, according to Ned V. Col-

(TURN TO PAGE 134, PLEASE)

Ted V. Rogers Award Winners

Here are the top three winners of the Ted V. Rogers Journalism Awards sponsored by Trailmobile, Inc., as a member of the ATA Foundation. Flanked on the left by Harry Eyler, vice-president of Trailmobile, and on the right by Walter F. Carey, chairman of The ATA Foundation, are the top winners with their awards (and checks for \$1,500). From left to right: Frank Megnin, editor of the Dove Creek (Colo.) Press; Verne Williams, Miami Daily News, and George Koether, Look magazine. The annual awards go to best professional newspaper and magazine writings on the subject of "Highway Development and Improvement."





WHERE A POUND SAVED IS A DOLLAR EARNED!

By saving dead weight, vacuum power can add several hundred pounds to <u>pay-load</u>, and earn extra dollars, as ton-miles build up.

In addition there is vital safety in having physical braking instantly available should power fail for any reason.

For these and other important reasons, vacuum power is the overwhelming choice on trucks, and Hydrovac* leads all other makes combined.

...It will pay you to look into

HYDROVAC (VACUUM HYDRAULIC) POWER BRAKING BY BENDIX

Bendix PRODUCTS South Bend, IND.



Only I listed.

For the ting the most of vided w missions els when standard

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1959 Truck Specifications

KEY TO DEFINITIONS

MAKE AND MODEL

Only Domestic Truck Models are

OPTIONAL UNITS

For the express purpose of best fit-ting the truck to the individual job most of the models listed can be provided with optional engines, trans-missions, axles, etc., and these mod-els when so equipped are considered standard stock models.

CHASSIS LIST PRICE

The chassis list price applies to the minimum standard wheelbase with standard tires and standard equip-ment. All prices are F.O.B. factory. Chassis list price does not include Chassis list price does not include the price of the Cab unless otherwise noted.

RECOMMENDED GROSS VEHICLE WEIGHT FOR NORMAL SERVICE

The Gross Weights published here-with are those supplied by manufac-

turers as their Recommended Gross Vehicle Weights for Normal Operating Conditions, and are based upon the Maximum Authorized Tire Size listed. In actual practice the manu-lacturer may either increase or de-crease the gross vehicle weight ratio when either favorable or unfavorable operating conditions are involved. when either favorable or unfavorable operating conditions are involved. Since the proper performance of a motor truck depends upon many factors, including grades, road conditions, etc., the gross weights that a manufacturer is prepared to reconditions, and the manufacturer's own standard of safety factors. Specific recommendations, therefore, should be obtained from the manufacturer's representative.

CHASSIS WEIGHT

The chassis weight listed includes the weight of the minimum standard wheelbase chassis, with cowl, with standard tires, with standard equipment, with crankcase and cooling system full, and 5 gallons of fuel in the tank. It does not include the weight of the Cab. This applies to C.O.E. as well as conventional chassis types. Exceptions are noted.

STANDARD TIRE SIZE

The standard tire size listed is that which is included in the Chassis List

MAXIMUM AUTHORIZED TIRE SIZE

THE SIZE.

The tire size listed in this column is the maximum size recommended by the manufacturer of the chassis for the Gross Vehicle Weight for Normai Operating Conditions. It is furnished at extra cost, if it differs from the standard size. Dual rears are understood; exceptions noted.

MINIMUM STANDARD WHEELBASE

The minimum standard wheelbase is the so-called standard wheelbase on which the Chassis List Price is based.

MAXIMUM STANDARD WHEELBASE

The maximum standard wheelbase is the extreme end of the standard range of wheelbases offered by the chassis maker.

MAXIMUM BRAKE HP.

Maximum Brake Horsepower at Given R.P.M. is actual dynamom-eter reading without accessories.

GEAR RATIO RANGE

Gear Ratio Range in High—Ratios within the range given are available at no extra cost. Exceptions are noted.

TRACTORS

Unless given the designation (N)— meaning not available as a tractor— all standard models may be assumed to be available as tractors. Exclusively Tractor models are designated

KEY TO ABBREVIATIONS

MAKES-ALL

All—Allison Div., General Motors Corp.

B—Bendix.
BL—Brown-Lipe.
Bu or Bud—Buda.
BW—Bendix-Westing-house.

C—Chevrolet.
Cl or Cla—Clark.
Con—Continental.
Cu or Cum—Cummins— Cu or Cum—Cummins-Diesel.

Deu—Deutz Air Cooled Diesel engine, Eat—Eaton, F—Ford, Fu—Fuller,

G-H-Goodyear-Hawley

GMC—General Motors

H-Hotchkiss

H—Hotchkiss,
Her—Hercules,
HS—Hall-Scott,
Int.—International
Harvester,
L—Lockheed,
LeR—LeRoi,
Lil—Lockheed front,
Warner thi Took!

LH—Lockheed front,
Wagner "hi-Tork" rear.
LT—Lockheed type front
Timken rear.
LW—Lockheed front,
Wisconsin rear.
M—Midland.

Powermatic available.
 4.11 with overdrive;
 3.36 with Powerglide

transmissions,
2-3.70 available.

Discrete available.

4-7.17 available.

4-7.17 available.

5-348 V-8 Workmaster

Special engine available.

Spicer available.

4-Clark 5 speed available.
2-3.92 ratio Positraction available.

COLEMAN

N.P.—New Process.

O or Ow-Own.

O or Ow—Own.
Op or Opt.—Optional.
Shu—Shuler.
Spi—Spicer.
T or Tim—Timken-Detroit—Westinghouse.
TW—Timken-Detroit—Wiscondon

Wisconsin.

Var—Variable.

WG—Warner Gear.

Wau—Waukesha.

W or Wis-Wisconsin.

W-B—Wagner or Bendix.

WE—Wagner Electric.

Wg—Wagner "hi-Tork."

REAR AXLE

z—Double Reductio
S—Spiral bevel.
W—Worm.
4—Three Quarters
Floating.
½—Semi-Floating.

Final Drive and Type
B—Hevel.
CD—Chain Drive.
F—Full-floating.
H or Hy—Hypoid.
d—Dual range axle.
2—Double Reduction.

T—Torque Tube.
FT—Full-floating,
tandem drive.
P—Planetary.

GEAR RATIOS

(**)—Only one ratio.

Drive and Torque
H—Hotchkiss (springs)
R—Radius Rods.
L—Parallel Torque Rods.
T—Torque Arm.

GOVERNOR STANDARD

KEY TO REFERENCES

c.f.—Cab Forward design. c.a.e.—Cab-Over-Engine design. l.c.f.—Low cab forward

- design.
 (D)—Diesel-engine
- (D)—Dieset-engine
 equipped.
 (T)—Designed for tractor
 use only.
 (C)—Ford or Chevrolet
 Models.

- (R)—Remanufactured
- Fords. enotes "Includes Cab" when used with weights or prices. A.D.

CHEVROLET

- †-283 V-8 Trademaster
- †=283 V-8 Trademaster engine available. ††=283 V-8 Taskmaster engine available. å=283 V-8 Super Task-master 4 barrel car-buretor engine availa-able. †—Overdrive optiomal. å=100 per positional designational designation available.

available available.

+ Hydramatic available.

-5 speed New Process transmission available.

1959

11.00/22 also available.
 Fu5A65 or Spicer 6352 also available.

t—Cum HRB600 also available with horse-power of 165-1800.

- *—Front only; rear, 7.50/ 168. †—Front only; rear, 7.50/ 208. *—Front only; rear, 8.25/ 168. *—Front only; rear, 7.50/
- Front only; rear, 7.50/ 20D.

1—Torque Divider, Timken T70-2 speed.

- *-With 2-speed transfer
- ** With 3-speed auxiliary and 2-speed transfer
- case.

 RC—Chevrolet axle remanufactured.

 RF—Ford axle remanufactured.

FEDERAL

*-Also available with tandem rear axle.

-Other options available.

-Models available with tilt cabs.

KENWORTH

- ← Timken TK-500 PA
 Trailing Axle.
 ← Both C.O.E. and cab
 beside engine optional.
 ← And 8031.

MARMON-HERRING-

.Three-speed trans. opt.

OSHKOSH

f-14.00/20 front.

- Model OA-145 and 331-OA LPG engines can be furnished.
 Two speed axle avail-able.

- able.
 1—Model 255-OA-LPG or OA-130 engine can be furnished.

 OH-160 LPG or OH-185 engine can be furnished.

 A technique can be furnished.
- -Includes cab, fuel, oil, *—Includes
 water.

 *—Cummins HRF8,
 NH195, NH220, NTO
 engines can be fur-
- nished.

 "—Model OV-235 or OV220 LPG engine can
 be furnished.

 -OH-170, 330 OA-LPG
 or OH-160-LPG or
 OH-185 engine can be
 furnished.

- OA-145or 331-OA-LPG, OH-160-LPG or OH-185 engine can be furnished.
- Rear only: front,

**ETUDEBAKER

--Two speed 5.93-8.10 or 6.48-8.86 optional.

--Two speed 6.16-8.48 or 6.61-9.09 optional.

TRUCKSTELL

- WARD LA FRANCE 1—Available with optional
- 2—Available with optional rear axies.

 Available with 11.00/22 or 12.00/20 tires for G.V.W. of 60,000 lbs and optional front and
- Auxiliary transmissi Fuller 2A65, 3B65, 3A92 and 3B92.

WILLYS
*-Overdrive optional.

SPECIFICATIONS BEGIN ON NEXT PAGE

Continued from page 99

	WHEEL- BASE			TIRE	SIZES		ENGINE D	ETAI	LS			TRANSMISSI	ON	R	EAR A	LE	
MAKE AND MODEL	Minimum Standard Maximum Standard	Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)		Authorized as a Tire Size as Duals unless noted)	Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Make and Model	Forward Speeds	Make and Model	Gear and Type	Drive and Torque	Gear Rable Range in High
(c.f.) 6,95 (c.f.) 6,05 (c.f.) 7,05 (c.f.) 8,05 (c.f.) 8,05 (c.f.) 8,05 (c.f.) 9,05 (c.f.)	119 119 119 119 119 119 119 119 119 123 134 125 136 132 136 132 136 132 136 132 136 136 137 136 137 136 137 137 138 138 138 138 138 138 138 138 138 138	4900 4900 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 15	3750 3750 3750 3750 3750 3750 3750 3750	8.00 145 8.00 145 8.00 175 6.70 175 6.70 175 7.17.58 7.17.58 7.17.58 8.17.58 7.17.58 8.22.50	8.50 14\$ 8.70 15\$ 8.70 15\$ 8.70 15\$ 9.7	O-Hi. Thrift. O-Turbo Fire O-Th. Mas.† O-Th. Mas. † O-Th. Mas. Sp. O-Th. Mas. Sp. O-Th. Mas. Sp. O-Th. Mas. Sp. O-Th. Mas. O-Th. Mas. O-Th. Mas.† O-Th. Mas.† O-Th. Mas.† O-Th. Mas.†	8 3 1 2 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2	236 236 236 236 236 236 236 236 236 236	8.3	217 2275 2217 2217 2217 2217 2217 2217 2	135-4000 138-4000 150-40000 150-4000 150-4000 150-4000 150-4000 150-4000 150-4000 150-40000 150-4000 150-4000 150-4000 150-4000 150-4000 150-4000 150-40000 150-40000 150-400000000000000000000000000000000000	Own 19 Own 19 Own 19 Own 16 Ow	333333333333444445555555555555555555555	Own			*3.55 *3.55
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For three years...

4.89 4.89 102

Timken-Detroit® Lightweight Driving Tandems—First Choice With Big Over-the-Highway Operators!

These superior features make the difference:

Lighter than any comparable tandem on the market . . . but a real heavyweight when it comes to service. Besides increased payloads you get long, trouble-free service and lower operating costs. Time-proved, Timken-Detroit Lightweight tandem features include:

Driver Controlled Inter-Axle Differential. Torque is divided equally between axles, yet wheels of one axle can turn faster or slower than wheels of other axle. This means both axles are always doing equal amounts of work. Driving parts and tires last longer.

"In-Line" Propeller Shaft Drive. With straight-through drive, bearing and gear life is greatly increased because universal joint working angles are materially reduced.

Torsion Flow Axle Shafts. More splines, plus greater root and body diameter, add extra strength.

Hot Forged Rectangular-Shaped Axle Housings. Rectangular shape, combined with full strength corner sections, provides the greatest strength with minimum weight and size. Welded on bowl cover prevents leakage.

Hypoid Gears. Larger pinions and greater tooth contact give 30% more torque capacity, top efficiency and long life . . . plus lower maintenance costs.

Unmatched Parts Interchangeability. Most of the wearing parts—gears, bearings, shafts, differentials, brakes—are interchangeable with parts from Timken-Detroit standard single axles. Parts are readily available and less expensive.



WORLD'S LARGEST MANUFACTURER OF AXLES FOR TRUCKS, BUSES AND TRAILERS



Products of ROCKWELL-STANDARD Corporation

Continued from page 100

	WHEE	E			TIRE	SIZES		ENGINE D	ETAI	LS			TRANSMISSI	ON	REA	AR AX	LE	
MAKE AND MODEL	Minimum Standard	Standard	Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)		Maximum elle la Authorized elle la Tire Size (Duals unless noted)	Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratie	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Make and Model	Forward Speeds	Make and Model	Gear and Type	Drive and Torque	Gear Ratio Range in High
Dedge - Cont'd	129 129 129 129 132 132 108 108 108 104 106 153 193 236	126 171 193 193 193 192 162 162 126 123 153 153 217 236 254	25000 29000 30000 19500		7/17.5\$ 7/22.5 8/22.5 8/22.5 9/22.5 10/22.5 11/22.5 8/22.5 9/22.5 9/22.5 7/17.5\$ 8/22.5 8/22.5 8/22.5 8/22.5 8/22.5 8/22.5	7/17.5 9 22.5 10 22.5 10 22.5 10 22.5 12 22.5 12 22.5 10 22.5	Own Own Own Own Own Own	6 3 4 4 4 6 3 4 4 4 6 3 4 4 4 5 8 3 6 4 3 6 8 3	251 265 354 354 315 315 354 230 251 251 315	7.1 7.1 7.5 7.5 7.5 7.6 7.6 7.5 7.9 7.9 7.1	216 216 228 319 340 360 300 319 202 216 216 300 319	125 3600 130 3600 218 3900 224 3900 210 4.00 210 4400 218 3900 120 3600 120 3600 125 3600 125 3600 125 3600 210 4400 218 3900		4 4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5				4.1 -4.85 5.62 -6.8 6.2 -6.8 6.5 -7.11 ** -6.8 ** -7.2 ** -7.4 6.2 -6.8 6.5 -7.11 ** -6.8 5.5 -7.11 ** -6.8 6.2 -6.8 6.2 -6.8
R-427 R-450 KH K-501 L L-6602 LC-600	136 136 148 148 148 148	220 220 220 220 220 220 220 220	30000 30000 34000 34000 37000 37000	*8820 *8850 *10500 *10500 *11300 *11650	9.00/20 9.00/20 11.00/20 11.00/20 11.00/20 11.00/20 11.00/20	11.00/20 11.00/20 12.00/20 12.00/20 12.00/20 12.00/20 12.00/20	Con B6427 Int RD450 Her RXC Int RD501 Her RXLD Con R6602 Cum HRB600	6 4 x 47 x 6 41 x 5 x 6 41 x 5 1 4 6 4 1 x 5 1 4 6 4 1 x 5 1 4 6 5 1 x 6 5 1 x 6	427 450 529 501 558 602	6.5	325 388 395 444 430 465	141-2500 182-3000 132-2300 212-3000 154-2400 200-2600	Fu 5A43 Fu 5A43 Fu 5A620 Fu 5A620 Fu 5C650 Fu 5C650 Fu 5C650	5 5 5 5	Tim QT340	Fd Fd 2F 2F 2F 2F 2F 2F	R	6.42 8.31 6.42 8.31 ** 9.71 ** 9.71 ** 9.71 ** -9.71
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Ford Rancher Courie F-10 F-25 F-36 F-60 F-77 F-77 F-78	118 118 118 118 118 118 0 110 0 130 0 130 130 0 130 0 130 0 132 130 0 132 0 132	118 118 118 118 118 118 118 118 118 118	8 460 8 460 8 460 8 460 8 500 8 740 980 9 980 9 980 1500 1500 2 1700 2 1700 2 1700 2 2 2100 2 2 2200	0 3557 0 3611 0 3477 0 3684 0 43034 0 43034 0 4374 0 4374 0 4451 0 4451 0 4486 0 4860 0 4860 0 4860 0 4542 0 4542	8 7.50 148 7 7.50 148 5 7.50 148 5 7.50 148 5 7.50 148 5 7.50 148 5 7.50 148 5 7.50 148 6 7.50 148 6 7.50 168 6 7.50 168 6 7.50 168 7 7.50 188 7 7.50 188 7 7.50 188 7 7.50 188 7 7.50 188 7 7.50 188 7 7.50 188 7 7.50 188 7 7.70 188 7 7 7 7 7 8 7 7 7 7 8 7 7 7 7 8 7 7 7 7	8.00 14\$ 8.00 14\$ 8.00 14\$ 8.00 14\$ 8.00 14\$ 8.00 14\$ 8.00 14\$ 8.00 14\$ 8.00 14\$ 8.00 14\$ 8.00 14\$ 8.00 14\$ 8.00 12\$ 9 17.7 5\$ 8 19.5\$ 8 19.5\$ 8 19.5\$ 8 19.5\$ 8 19.5\$ 8 19.5\$ 8 10.22.5 10.22.5 10.22.5 10.22.5 10.22.5 10.22.5	Ford EBP Ford EDB Ford EBP Ford EBP Ford EBR Ford EEL Ford EEL Ford EEK Ford EEK Ford EEL Ford EER Ford EBR	6 3 4 3 4 3 4 3 4 4 3 4 4 4 4 4 4 4 4 4	29 355 22 29 35 22 29 22 29 22 29 22 29 22 29 22 29 22 29 22 29 29	2 10.13 8.2 9.2 10.13 8.2 7.3 8.2 7.3 8.7 7.2 3 8.7 7.2 7.3 8.7 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7	1 29:0 39:0 21:1 29:0 39:0 39:0 39:0 39:0 39:0 26:0 39:0 26:0 39:0 26:0 27:0 27:0 27:0 27:0 27:0 27:0 27:0 27	5 200 -446 5 300 -466 5 300 -466 5 200 -466 5 200 -466 5 300 -466 7 139 -426 9 186 -406 9 186 -406 9 186 -406 9 186 -406 17 139 -426 9 186 -406 17 139 -426 17 139 -426 17 139 -426 17 139 -426 17 139 -426 17 139 -426 17 139 -426 19 186 -406 19 186 -406 19 186 -406 19 186 -406 19 186 -406 19 186 -406 19 186 -406 19 186 -406 19 186 -406 19 186 -406 19 186 -406	0 Ford*		Ford 3000 Ford 3000 Ford 3300 Ford 3300 Spi 60 Spi 60 Tim B100 Tim B100 Tim C100* Tim D100*	TITITIES TO SEE SEE SEE SEE SEE SEE SEE SEE SEE SE		3.89 3.70 3.89 3.70 3.70 3.70 3.70 4.86 5.14 4.86 5.14 8.2 5.14

For references and abbreviations see page 99

Continued on page 104

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11955

New Holley '59 Carburetors can be serviced in minutes-WHILE ON THE ENGINE!

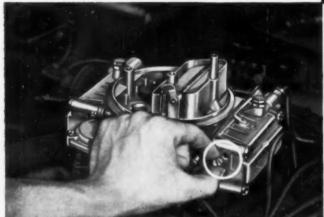
Many 1959 automobiles and trucks will be equipped with newly designed Holley two and four barrel carburetors that have a special needle and seat assembly which makes carburetor service a matter of minutes.

All carburetor minor repair - 90% of carburetor service requirements under 30,000 miles-can be completed in the time it takes to remove and replace a single spark plug; and, without removing the carburetor from the engine.

These Holley 1959 models will substantially reduce customer service complaints and will make minor repair work more profitable and more accurate for the service man. With just the four simple steps shown on this page service men can:

- 1. Purge the carburetor of dirt and foreign matter.
- 2. Accurately adjust the fuel level in the bowl.
- 3. Replace or adjust the fuel inlet needle and seat.

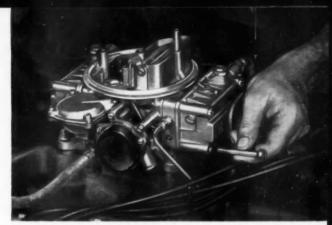
These new 1959 carburetors are another example of Holley's continuing leadership in the design and engineering of fuel and ignition equipment.





For more than half-a-century - original equipment the automotive



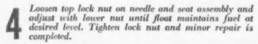


With ignition off, remove lower bowl screw farthest from fuel inlet. Allow all gasoline to drain, purging the carburetor of dirt and sludge.



Remove fuel needle and seat and examine for wear and general condition. Replacement can be made at low cost although there should be no evidence of wear until

With engine running, remove sight plug from carburetor bowl opposite fuel inlet. If fuel level is too high, exces-sive fuel will drain through sight plug opening. For proper operation, fuel level should be on line with threads at bottom of sight port.





104

1959

Continued from page 102

	WHEEL- BASE			TIRE	SIZES		ENGINE D	ETA	LS			TRANSMISSIO	ON	REA	AR AX	LE	
MAKE		cle Weight Service			al rear gle rear												
AND MODEL	Minimum Standard Maximum Standard	Grass Vehicle V for Normal Serv	Chassis Weight (See definition)	Standard Front and Rear	Maximum Authorized Tire Size (Duals unless noted)	Make and Model	No. of Cylinders, Bore and Strake	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Make and Model	Forward Speeds		Gear and Type	Drive and Torque	Gear Ratio Range in High
Ferd—Cent'd F-850 F-1000 F-1000 C-850 C-950 C-1000 C-150 C-750 C-750 C-760 C-760 B-600 B-700 B-700 C-750 C-750 T-700 T-700 T-750 T-850	132 192 132 192 132 192 132 192 99 133 99 133 99 133 99 133 99 133 99 133 99 133 99 133 99 133 99 133 154 154 154 154 155 156 156 192 156 192 156 192 156 192	25000 25000 25000 30000 25000 30000 31000	~8025 47540 47670	10/22.5D 11/22.5D 11/22.5D 11/22.5D 11/22.5D 11/22.5D 11/22.5D 11/22.5D 11/22.5D 8/22.	11/22.5 12/24.5 12/24.5 12/24.5 11/22.5 12/24.5 11/22.5 12/24.5 12/24.5 10/22.	Ford EDL Ford EDL Ford EDN Ford EEL Ford EEL Ford EEL Ford EEL Ford EEL Ford EEL Ford EEK Ford EEL Ford EDM FOR	8-4-1	292 292 292 292 292 292 292 292 292 292	7.596.868.77.77.868.77.77.868.77.77.868.77.77.868.77.77.77.77.77.77.77.77.77.77.77.77.77	350 430 4400 350 430 4400 260 270 260 270 260 270 260 270 207 260 270 207 260 207 260 207 260 207 260 207 260 207 260 360 360 360 360 360 360 360 360 360 3	226-3800 226-3800 227-3400 227-3400 226-3800 226-3800 226-3800 226-3800 226-3800 226-3800 227-3400 186-4000 186-4000 187-3800 188	Cla 265V* WG 788A* WG 798A* WG 798A* WG 798A* WG 798A* WG 798A* WG 798A* Cla 250 Ford* Ford* WG 798C* WG 788C* WG 788C* Cla 250 Cla 250 Cla 250 Cla 250 Cla 250 Cla 250	555555444445554444444533333555555555	Tim B100 Tim B100 Tim C100° Tim C100° Eat 22M Eat 22M Eat 28M Eat 28M Eat 34M Eat 34M Eat 34M° Eat 34M° Eat 34M° Eat 34M°	\$2555555555555555555555555555555555555	TITITITITITITITITITITITITITITITITITITI	6.56-7.1 6.56-7.1 6.56-7.1 6.56-7.1 6.56-7.1 6.56-7.1 6.56-7.1 6.56-7.1 6.56-7.1 6.56-7.1 7.2-7.1 7.1-7.1 6.2-7.1 7.1-7.1 6.2-7.1 7.1-7.1 6.2-7.1 7.1-7.1 6.2-7.1 7.1-7.1 6.2-7.1 7.1-7.1 6.2-7.1 7.1-7.1 6.2-7.1 7.1-7.1 6.2-7.1 7.1-
(D) 4982 (D) 4922 (D) 4924 (D) 4924 (D) 4925 4925 (D) 555 (D) 844	153¼ 251 5153¼ 251 2 191 25 3 190 25 4 190 25 4 190 25 5 190 25 5 190 25 6 190 25	5 42000 5 42000 5 45000 5 65000 5 43000 5 42000 5 45000	12700 13900 11800 10500 13800 15000 16200 16200 14020 12500 13700 22500 22800	0 10.00/20 0 10.00/20 0 10.00/20 0 10.00/20 0 10.00/20 0 10.00/20 0 10.00/20 0 10.00/20 0 11.00/20 0 10.00/20 0 10.00/20 0 10.00/20 0 10.00/20 0 10.00/20 0 10.00/20 0 10.00/20	11.00/22 11.00/22 11.00/22 11.00/22 11.00/22 11.00/22 11.00/22 11.00/24 11.00/22 11.00/22 11.00/22 11.00/24 11.00/24 14.00/24	Cum JTB Cum JTB Cum JTB Cum JTB Cum NH220 H.S. 590GV3 Cum NH220	6-4)-6x5 6-4)-6x5 6-5)-6x6 6-5x5 6-5)-6x6	401 74: 590 74: 74: 74: 74: 590 590 74:	16.0 16.0 6.6 16.0 16.0 16.0	350 350 350 350 535 3490 535 535 535 535 535 535 535 53	180-240 180-240 220-210 232-280 220-210 220-210 220-210 220-210 220-210 232-280 232-280 200-210 200-210	0 5A65^4 0 5A65^4 0 5241^4 0 Fu 5C72^4 0 8241^4 0 8241^4 0 8241^4 0 8241^4 0 Fu 5C72^4 0 Fu 5C72^4 0 8241^4	15 15 15 15 15 15 15 15 15 15 15 15 15 1	Tim R2004 Tim SQW Tim R200 Tim R200 Tim R200 Tim R20044 Tim SQW Tim SFD4640 Tim SCHD Tim SQHD Tim SQHD Tim SQW Tim SFD4640 Tim SFD4640 Tim SFD4640	H2F H2F WF H2F 2F WF B2F H2F WF B2F B2F	HELLI HI	5.91-9. 5.91-9. 5.97-9. 5.67-8. 4.72-8. 8.07-11 5.91-9. 5.67-8. 8.07-11 8.07-11
Marmon-Herr, (Sc. Bus Ch.) 4SC (Sc. Bus Ch.) 6SC (Sc. Bus Ch.) 5SC (Sc. Bus Ch.) 4SC (Sc. Bus Ch.) 6SC (Sc. Bus Ch.) 5SC	233 23 178 17 205 20	5 2400 3 2400 8 2400 5 2400	790 797 784 790	0 9.00/20D 0 9.00/20D 0 9.00/20D 0 9.00/20D 0 9.00/20D 0 9.00/20D	10.00/20 10.00/20 10.00/20 10.00/20 10.00/20 10.00/20	Ford ECT2V Ford ECT2V Ford ECT2V Ford ECT4V Ford ECT4V Ford ECT4V	8-3 x3 3 8-3 x3 x3 x3 x3 x3 x3 x3	33:	7.1	318 318 326 326	200-380 200-380 212-380 212-380	0	18	************	HF HF HF HF	HHH	6.8 -7. 6.8 -7. 6.8 -7. 6.8 -7. 6.8 -7. 6.8 -7.
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For references and abbreviations see page 99

Continued on page 106



CASE AFTER CASE . . . AFTER CASE . . . HAS MADE IT A MATTER OF RECORD, THAT



Wherever Engines Work

Engines without shutters can have a temperature difference between inlet and outlet of over 100°. The reason is clear:

While the engine is heating, the coolant is being held in check . . . allowing the radiator to supercool. When maximum thermostat setting is reached, the hot coolant coming from the top of the engine, forces the super-cooled coolant through the inlet. The result can be an engine running at two extreme temperatures at the same time!

The only sure way to reduce this sludge-making, block-cracking and engine-wearing process is to keep your overall operating temperature EVEN. You can do so by thermostatically controlling the air flow through the radiator and over the engine with KYSOR Automatic Shutters.

Contact Kysor or see your Kysor Dealer

959

LUTOMATIC SHUTTERS
KEEP ENGINES STRONGER
LONGER . . . BETWEEN

MAJOR OVERHAULS!

KYSOR HEATER COMPANY, CADILLAC, MICHIGAN

KY50R

HEATING AND TEMPERATURE CONTROL EQUIPMENT FOR ALL TYPES OF COMMERCIAL VEHICLES

Continued from page 104

	WHEE	F			TIRE	SIZES		ENGINE D	ETA	ILS			TRANSMISSI	ON	RE	AR A	LE	
MAKE		-	cle Weight Service		D-dua S-sing	il rear ple rear											9	
MODEL	Minimum	Standard	Gross Vehicle V for Normal Serv	Chassis Weight (See definition)	Standard Front and Rear	Maximum Authorized Tire Size (Duals unless noted)	Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Make and Model	Forward Speeds	Make and Model	Gear and Type	Drive and Torque	Gear Ratio Range in High
ee—Cont'd (c.o.e.) AC-603 AC-603 A-700 A-700 A-700 A-700 A-700 A-700 D B-700D D B-700D D C.o.e. AC-703 AC-7	151 139 139 133 15834 15834 15834 122 108 108 108 256 238 256 238 256 238 256	187 219 238 256 238 256 208	29000 26000 31000 33000 31000 31000 31000 31000 31000 20500 20500 22500 23500 23500 23500	*10210 *8180 *8690 *8690 *8705 *9355 *9355 *9356 *10620 *10607 *110600 *12070 *9830 *10505 *6835 *6845 *6885 *6985	11 22.5 11 22.5 10 22.5 11 22.5 9 22.5 9 22.5 9 22.5 9 22.5 9 22.5 10 22.5 10 22.5 10 22.5 10 22.5 10 22.5	12, 24, 5 12, 24, 5 11, 24, 5 11, 24, 5 11, 24, 5 12, 24, 5 10, 22, 5 10, 22, 5 10, 22, 5 11, 22, 5	Own OV207" Cum JT-6-B Own OV207" Own OV207" Own OV207" Own OV207" Own OV207" Cum JT-6-B Cum NH180" Cum NH180" Cum NH180" Cum NH180" Own OV207" Cum JT-6-B Own Ov207"	8 -3 (x4) (6 -4) (x5 -6) (x4) (x5 -6) (x4) (x5 -6) (x4) (x6 -6) (x6 -6	401 390 390 390 390 401 672 672 672 672 390 401 255 255 255 292 292 292	7.3 7.3 7.3 7.3 16.0 15.5 15.5 15.5 15.5 16.0 6.7 6.7 6.7 6.7 6.9 6.9	412 354 354 354 354 412 475 475 475 475 354 419 194 194 230 230 230 230	207 340(207 340(207 340(207 340(207 340(207 340(207 340(180 210(180 210(180 210(175 250(110 340(110 340(110 340(110 340(110 340(130 330) 130 330(130 330)) Fu RAS) Fu SAS5) Fu SAS5) Fu SAS5) Fu SAS5) Fu SAS5) Fu SAS5) Spi G453A) Spi G453A) Spi G453A) Spi G453A	855555555554088444445555	Eat 1911 Tim R140+ Tim R140+ Tim F140+ Tim F140+ Tim F140+ Tim F140+ Tim H140+ Tim L140 Tim L140			5.63 9.6 4.89 7.6 5.26 7.5 5.26 7.5 5.28 7.5 5.28 7.4 5.28 7.4 4.11 6.1 4.11 6.1 5.26 7.4 6.8 7.6 6.8 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6
tudebaker 4E1 4E2 4E3 4E6 4E7 4E1 4E11 4E11 4E11 4E11 4E41 4E41 4	112 112 112 112 112 112 112 112 113 131 131	122 122 122 122	5000 5200 5200 7000 10000 15000 15000 19000	2380 2290 2070 2290 2380 2538 2628 3140 3050 3638 3730 4448	6.00 16S 6.00 16S 7.10 15S 7.10 15S 7.10 15S 7.00 16S 7.00 16S 7.00 17S 7.00 17S 7.00 17S 8.19.5D 8.19.5D 8.25.20D	6.50 16S 6.50 16S 6.50 16S 6.50 16S 6.50 16S 6.50 16S 7.50 17S 7.50 17S 7.50 16 7.50 16 9.00 20 9.00 20 10.00 20	Own 1E Own 3E Own 4E Own 4E Own 4E Own 3E Own 3E Own 3E Own 4E Own 3E Own 4E Own 3E Own 6E	6-3x4 8-3-2x3-2 6-3-2x4-3 8-3-2x4-3 8-3-2x4-3 8-3-2x3-3 8-3-2x4-3 8-3-2x4-3 8-3-2x4-3 8-3-2x4-3 8-3-2x4-3 8-3-2x4-3 8-3-2x3-3 8-3-2x3-3 8-3-2x3-3 8-3-2x3-3	170 250 246 170 246 256 256 256 246 256 246 256 246 256 246 256 246 256 246 256 246 256 246 256 246 256 246 256 246 256 246 246 256 256 246 256 256 256 256 256 256 256 256 256 25	8.00 7.50 8.00 8.00 7.50 7.50 7.50 7.50 7.50 7.50 7.50 7	133 225 196 133 196 225 196 225 196 225 196 225 225	75 360 141 380 94 320 75 360 94 320 141 380 141 380 94 320 94 320 94 320 141 380 154 380	0 WG T90B 0 WG T89C 0 WG T90B 0 WG T90B 0 WG T90B 0 WG T90B 0 WG T98C 0 WG T98A 0 WG T98A 0 WG T98A 0 WG T98A 0 WG T98A 0 WG T98A	3 3 3 4 4 4	Spi. 2211 Spi. 2211 Spi. 2211 Spi. 2211 Spi. 2211 Spi. 2211 Spi. 60 Spi. 60 Tim B100 Tim E102 Tim E102 Tim E102	***************************************		4,27-4, 3,73-4, 4,09-4, 4,09-4, 3,73-4, 4,10-4, 4,10-4, 4,86-5, 5,14-5, 6,20-6, 6,20-6, 6,20-6,
Pard La Fr. D-10 D-10 D-3 (D) D-3	149 149 149	220 220 220	29000 29000 29000	49500 410000 410000	0 10.00 20 0 11.00 20 0 11.00 20 0 11.00 20 0 11.00 22	11.00/20 11.00/22 11.00/22 11.00/22 11.00/22	Con T6427 Con T6427 Con R6572 Con R6602 Cum HB600	6 4 4 x 4 3 x 6 4 4 x 4 3 x 6 4 3 x 5 3 x 6 4 3 x 5 3 x 6 4 3 x 5 3 x	577 600	2 5.9		152 - 260 189 - 260 198 - 260	0 Ful 5A430 0 Ful 5A430 0 Ful 5C650 0 Ful 5C650 0 Ful 5C650	55555	Tim U-200 Tim R-200 Tim R-200	8 \$2 \$2 \$2 \$2 \$2	RRRR	** -
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odge W10 W20 W30 W300h W50	0 108 0 116 0 129 4 126	116 129 126	800 1000 950	0	7/17.5S 7/17.5S 8/19.5S 7.50/16S 8/22.5	7/17.5S 7/17.5 7/17.5 9.00/16S 9/22.5	Own Own Own Own	6-314x454 6-314x454 6-314x454 6-314x454	23 25 23	0 7.5 0 7.5 1 7.5 0 7.5 5 7.5	202	120 360 120 360 125 360 113 360 113 360	0	3 4 4 4			H	
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(c) FD201/ (c) FD201/ (c) FD201/ (c) FD201/ (c) FD251/ (e) FD201/ (e) FD201/ (e) FD251/ (e) FD251/ (e) FD251/	A 130 B 130 B 130 B 130 A 132 C 131 D 154	172 173 174 174 173 173	2 1900 2 1900 2 2700 1 1700 3 1900	0 570 0 570 6 750 0 610 0 600 0 650	0 7.50/20 0 7.50/20 0 7.50/20 0 8.25/20 0 8/22.5 0 8/22.5 0 8/22.5 0 10/22.5	9.00/20 8.25/20 8.25/20 9.00/20 10/22.5 10/22.5 11/22.5	Chevrolet Ford Ford Ford Chevrolet GMC Int Ford	6 3 4 x 3 1 8 3 .5 x 3 .1 8 3 .6 x 3 .1 8 3 .8 x 3 .8 8 3 7 x 3 8 3 1 x 3 4 8 3 .8 x 3 .6	23 25 31 28 34 26	7 7.1 3 8.1 7 7.1 9 6.1	5 215 5 226 2 286 8 276 8 317 5 227	132 420 140 390 170 390 160 420 206 440		1 1 8 8 1	Chevrolet 0 Ford 0 Ford 0 Ford Chevrolet GMC 0 Tim F105 0 Eat 1790	Hyf HF SF Hyf Hyf HF SF	H	7.17-
ederal 260R4 (D) D200R4 300R4 (D) D300R4 400R4 (D) D400R4 (D) D500R4 (D) D500R4 (D) D700R4 (D) D700R4	4 145 4 145 4 145 4 145 4 145 4 145 4 145 4 145	193 193 193 193 193 193 193	3 2200 3 2400 3 2400 3 2900 3 2900 3 3400 3 4000 3 4000	0 *748 0 *737 0 *794 0 *1080 0 *1087 0 *1128 0 *1244 0 *1233	5 8.25/20 5 8.25/20 0 9.00/20 5 9.00/20 2 10.00/20 0 11.00/22 0 11.00/22 2 11.00/22 0 11.00/22		Her JXD Con TD6427 Her JXLD Cum JN6B Con T6427 Cum JBS600 Con U6501 Cum HRF8600 Con R6602 Cum NHB600	6 4x41 6 4x47 6 4x41 6 41 x5 6 4 x47 6 41 x5 6 41 x5 6 51 x6 6 47 x55 6 51 x6	32 42 33 40 42 40 50 74 60 74	7 9 1 7 1 1 3 2	254 307 264 296 356 356 413 556 484 538	116 240 138 300 125 250 179 300 150 250 178 260 180 200 1232 280	00 Cla 205V 00 Cla 290V 00 Cla 205V 00 Cla 290V 00 Cla 290V 00 Cla 290V 00 Cla 290V 00 Fu 5A65 00 Fu 5A65 00 Fu 5A65	555555555	Tim L140 Tim L140 Tim OT140 Tim OT140 Tim R140 Tim R140 Tim R140	H H H H H H H2		00
WD "17" "19 "19 "19 "25" "28 "231 "234 "26" "28 "264! "28 "284!	0 142 1 142 2 142 6 142 0 142 1 142 0 142 0 142 0 142 0 142	21! 21! 202 231 202 202 202 202 202 202	5 2000 5 2000 2 2800 8 3200 2 2300 2 2300 2 2800 2 2800 2 2800	0 762 0 768 0 889 0 1199 0 810 0 900 0 885 0 980 0 886	7.50/20D 0.8.25/20D 0.8.25/20D 0.10.00/20D 0.11.00/20D 0.9.00/20D 0.10.00/20D 0.10.00/20D 0.10.00/20D 0.10.00/20D	10.00 20S 10.00 20S 10.00 20S 11.00 20 13.00 20S 10.00 20 10.00 20 11.00 20 11.00 20	Int BD240 Int BD264 Int BD308 Int BD308 Int BD308 Int BD308 GMC 3-71 Int RD372 GMC 4-71 Int RD408 Cum JT68	6 3 1 x 4 4 6 3 1 x 4 5 6 4 5 x 5 6 4 1 x 5 6 4 1 x 5 6 4 1 x 5 6 4 1 x 5 6 4 1 x 5 6 4 1 x 5 6 4 1 x 5	26 30 45 40 30 21 37 28 40	1 6. 1 16. 8 6. 3 16. 2 6. 4 17. 8 6.	5 241 5 281 5 381 3 407 5 281 0 277 5 301 0 371 5 331	3 153-386 3 154-386 3 182-306 7 175-256 3 154-386 7 102-216 3 185-326 4 150-236 3 175-326	00 WG T9 10 Int T31 10 Int T31 10 Int T31 10 Int T62 10 Ful 5665 10 Int T31 10 Ful 5A430 10 Int T51 10 Ful 5C650 10 Int T51 10 Ful 5C650	450000000000	Own 23L Own 23L Own 23 Own 33A Own 23 Own 23 Own 23	SF SF SF SF SF SF SF SF SF	***	4.86-4 4.86-4 4.86-4 4.18-4 4.86-4

For references and abbreviations see page 99

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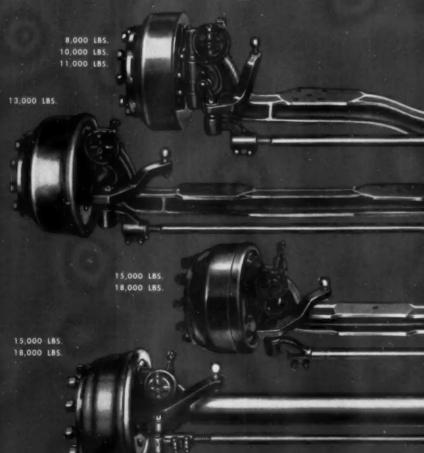
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Continued from page 106

1	WHEEI				TIRE			ENGINE D	ETA	LS			TRANSMISSIC	IN	REA	AR A)	CLE	
MAKE	-	-	Weight		D-dua S-sing													
MODEL	Minimum Standard Maximum	1	Gross Vehicle Wei for Normal Service	Chassis Weight (See definition)	Standard Front and Rear	Maximum Authorized Tire Size (Duals unless noted)	Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque ib. ft.	Max. Brake H.P. at R.P.M. Given	Make and Model	Forward Speeds	Make and Model	Gear and Type	Drive and Torque	Gear Ratio Range in High
our-Wheel Drive— ND Cont'd .*328 3270 3270 3880 4080 4080 4080 4090 *327	142 142 142 142 142 142 142 142 142	231 231 231 231 231 211 211 211 211 211	32000 32000 32000 36000 36000 40000 40000 40000 32000	12150 12930 11600 13100 13900 13970 14630 14800	11.00/20D 11.00/20D 11.00/20D	13.00 20S 13.00 20S 13.00 20S 13.00 20S 13.00 20S 14.00 20S 14.00 20S 14.00 20S 14.00 20S 14.00 20S	Int RD450 GMC 4-71 Cum HR98 Int RD501 Cum HRF68 Wau 145GK Wau 145GK GMC 6-71 Cum NH220 Int RD501	6 494x5 4 414x5 6 514x6 6 514x6 6 514x6 6 514x6 6 514x6 6 514x6 6 514x6 6 514x6 6 514x6 6 514x6	284 743 501 743 779 779 426 743	6.5 17.0 15.5 6.5 15.5 6.2 6.2 16.0 15.5 6.5	375 550 444 580 595 595 570 807	175-1800 212-3000 190-2000 216-2000 240-2400 227-2250 220-2100	Ful 5C650 Ful 5C720 Int T72 Ful 5C720 Ful 10A1120 Ful 10A1120 Ful 10A1120 Ful 10A1120	5 5 5 5 5 5 10 10 10 10 5	Own 33A Own 33A Own 33 Own 33 Own 33 Own 33 Own 33 Own 33	SF SF SF SF SF SF SF	TITITI	4.18-12. 4.18-12. 4.18-12. 4.85-14. 4.85-14. 5.71-8.5 5.71-8.5 5.71-8.5 4.18-12.
104 104 504 504 504 604 604 704 704 754 805 6704 6704 6704 6704 6704 6704 6704 6704	110 130 130 130 130 130 132 132 132 132 132 132 135 135	154 154 192 192 192 192 192 192 192 153 153 153	5600 5600 17000 17000 17000 21000 21000 21000 22500 22500 24000 27000 22500 22500 22500 22500 22500 22500 27000 27000 27000	*3425 *4964 *5089 *5089 *5339 *5464 *6753 *6758 *7003 *7812 *8157 *6970 *5985 *7513 *7902	6.50/16S 6.50/16S 7/22.5D 7/22.5D 7/22.5D 8/22.5D 8/22.5D 9/22.5D 9/22.5D 9/22.5D 9/22.5D 9/22.5D 9/22.5D 9/22.5D 9/22.5D 9/22.5D 9/22.5D 9/22.5D 9/22.5D 9/22.5D	6.50/16\$ 6.50/16\$ 8/22.5 8/22.5 8/22.5 10/22.5 10/22.5 10/22.5 10/22.5 11/22.5 11/22.5 10/22.5 11/22.5 11/22.5 11/22.5 11/22.5	Ford Ford Ford Ford Ford Ford Ford Ford	6 35 x 3 x 3 x 3 x 3 x 3 x 3 x 3 x 3 x 3	223 292 223 292 292 292 292 292 292 302 332 401 292 302 332 401	7.9 8.3 7.9 7.6 8.3 7.9 7.6 7.6 7.6 7.6 7.6 7.8 7.8	269 207 289 270 207 269 270 299 328 350 269 270 299 328	186 4000 139 4200 187 3800 187 3800 187 3800 187 3800 187 3800 187 3800 196 3800 212 3800 187 3800 187 3800 218 3800 218 3800 187 3800 187 3800 187 3800 187 3800 187 3800 187 3800	War T98A * War T98A * War T98A Cla 250V Cla 264V Cla 264V Cla 264V Cla 265V	4 4 4 4 4 4 4 4 5 5 5 5 4 4 5 5 5	Ford Ford Tim D100 Tim D100 Tim D100 Tim F106 Tim F106 Tim F106 Eat 1614 Eat 1614 Eat 1790A Eat 1614 Eat 1790A	HE HE HE HE HE HE HE HE HE	*************	
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Waiter (c.f.) FZN (c.f.) AEI (c.f.) AGI (c.f.) AGI	126 126 138 138	150 162 162	3800 3800 4200	0 1300 0 1400 0 1500	00 12.00/20S 00 12.00/24S 00 12.00/24S 00 12.00/24D		Wau 145GKB Wau 145GKB	6-41-(x45) 6-45-(x5) 6-51-(x6 6-5)-(x6	55 77 77	4 6. 9 6. 9 6.	2 44 2 58 2 58	0 165-22 5 240-24 5 240-24	00 Own FJN 50 Own FC 10 Own FA 10 Own FA	-	Own FCR	2 2 2 2 2	****	
(D)			3500	0 *1200	00 11.00/22 00 11.00/24 50 7.00/15S	11.00/22 11.00/24 7.00/15S	Cont 6513 Cum HB600	6-41/2x5% 6-51/2x6 4-31/2x4%	67	3 5.		0 150-18	00 Ful 5A620 00 Ful 5A920 00 WG T90C	1	Tim R462W Tim R462W	\$2 \$2 H	8	

For references and abbreviations see page 99

Continued on page 110

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Alternator-Generators as factory-installed special equipment on more than

90% of all new trucks

SPECIFY L-N ALTERNATOR-GENERATORS FACTORY-INSTALLED ON ANY OF THESE NEW TRUCKS

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THE L-N ALTERNATOR-GENERATOR IS A COST-CUTTING WORKHORSE!



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★ Ample low-speed output . . . safe high-speed output . . . long life

* Permits full use of all accessories at all speeds

★ Improves performance and cuts maintenance costs for entire electrical system

★ Assures easy starting even in the most severe weather

L-N Heavy-Duty Alternator-Generator —recommended for

recommended for heavy-duty and over-the-road service.



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- ☐ Have your salesman call on me.

ome Title

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614-

Continued from page 108

	WHEEL				TIRE	SIZES		ENGINE D	ETA	LS			TRANSMISSIO	NC	RE	AR AX	LE	
MAKE		-	veight		D-dua S-sing	l rear le rear											9	
AND MODEL	Minimum Standard Maximum	Standard	Grnss Vehicle Weight for Normal Service	Chassis Weight (See definition)	Standard Front and Rear	Maximum Authorized Tire Size (Duals unless	Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque Ib. ft.	Max. Brake H.P. at R.P.M. Given	Make and Model	Forward Speeds	Make and Model	Gear and Type	Drive and Torque	Gear Ratio Range in High
our-Wheel Drive-	-Cont'd	1																
Villys—Cont'd F4-134-4WD L6-226-4x4 L6-226-4x2 L6-226-4x2 CJ-38 CJ-5 CJ-6 DJ-3A FC-150 FG-170	104 5 10 104 5 10 118 1 80 3 80 81 101 1 80 3 80	14 14 18 18 101 81	6000 4500 4500 6000 3500 3750 3900 2600 5000 7000	1963 1814 2127 1725 1756 1805 1352 2087	7.00 15S 6.70 15S	7.00 16S 7.00 15S 6.70 15S 6.70 15S 6.00 16S 6.00 16S 6.00 16S 6.40 15S 7.00 16S	Own Own Own Own Own Own Own Own Own	4 3 x43 6 6 3 x43 6 6 3 x43 6 4 3 x43 6 6 3 x43 6 6 3 x43 6	226 226 226 134 134 134 134 134	6.9 6.9 6.9 6.9 6.9 6.9 6.9	190 190 190 114 114 114 105 114	105 3600 105 3600 105 3600 72 4000 72 4000 72 4000 72 4000 72 4000	WG T90C WG T90J WG T86 WG T90J WG T90C WG T90C WG T90C WG T90A WG T90A	33333333	Spi 53-2 Spi 44 Spi 44 Spi 53 Spi 44-2 Spi 44-2 Spi 44-2 Spi 23 Spi 44-1 Spi 53	HHHHHHHH	IIIIIII	** -5.3 ** -4.5 ** -5.3
Six-Wheelers																		
Dodge T700 T800-800 H.D. T900	144 1	92	35000 37000 49000		8/22.5 9/22.5 11/22.5	10/22.5 10/22.5 12/22.5	Own Own Own	8-3 1x35 8-3 1x35 8-3 1x35	354	7.5 7.5 7.5	319 340 360	224 3900		5 5		1		6.8 -7.8 6.8 -7.8 7.8 -8.6
Ounlex TH6 RH6 (D) L6	160 2	809	30000 40000 45000	11500	8.25/20 10.00/20 11.00/20	9.00/20 11.00/20 12.00/20	Her JXD Con B6427 Cum HB600	6-4x41 6-41x47 6-41x6	427	6.2 6.6 17.0	240 325 495	141-2600	Fu 5B331 Fu 5A43 Fu 5A920	5	Tim SBD1055 Tim SD3010 Tim SD454	BF 2F SF2	R	** 6.1 8.27 6.8 -8.1
Fabco (c) FD201A (c) FD201B (c) FD201B (c) FD201B (c) FD201D (c) WT WT	130 C 130 C 130 C 130 C 154 1	Opt Opt Opt 190	30000 30000 30000 40000 27000 30000 30000	10500 10500 13000 8700 10600	8.25 20 8.25 20 8.25 20 8.25 20 8.22 5 9.00 20 9.00 20	9.00 20 9.00 20 9.00 20 9.00 20 10 22.5 9.00 20 9.00 20	Chevrolet Ford Ford Int Ford GMC	6-3%x31% 8-3.5x3.1 8-3.6x3.1 8-3.8x3.5 6-31%x41 8-3.8x3.6 6-4x4	261 239 256 317 282 332	7.2 7.5 7.5 7.2 6.5 7.6	220 215 228 286 251 328	135 4000 132 4000 140 3000	Ford° Ford° Int°	10 10 10 30	Chevrolet Ford Ford Eat Tim F105 Tim F105	HyF HF SF SF HF	***	** -6.8 ** -6.8 7.17 7.6 ** -6.8
Federal 200 R66 (D) D200 R66 300 R66 (D) D300 R66 400 R66 (D) D400 R66 (D) D500 R66 (D) D500 R66 (D) D500 R66 (D) D700 R66 (D) D700 R66	157 1 157 1 157 1 157 1 157 1 157 1 157 1 157 1	193 193 193 193 193 193	42000 42000 49000 49000 61000	*8570 *8554 *9129 *12377 *12677 *14400 *15400	8.25/20 8.25/20 9.00/20 9.00/20 10.00/20 11.00/20 11.00/22 11.00/22 11.00/22		Her JXD TD 6427 Her JXLD Cum JN6B Con T6427 Cum J85600 Con U6501 Cum HRFB600 Con R6602 Cum NHB600	6 4x4 6 4x4 6 4x4 6 4 x5 6 4 x5 6 4 x5 6 5 x6 6 5 x6 6 5 x6	320 427 339 401 427 401 501 743 602 743		307 264 290 356 350 413 550 484	138-3200 125-2500 179-3000 150-2500	0 Cla 290V 0 Cla 205V 0 Cla 290V 0 Cla 290V 0 Cla 290V 0 Cla 290V 0 Cla 5A65 05A65	5 5 5	Tim SDHD Tim SFHD Tim SFHD Tim SLHD Tim SLHD Tim SQDDSQDDSFDD	H H H H H H H2 H2		** 7. ** 7. ** 7. ** 8.
FWD 6-366 6-364D 6-368D 6-407 8-409D 6-606D 6-606D 6-457 6-456D 6-486D 6-487 6-488D 6-607 6-333 6-355 6-355 6-365 6-486D	162 184 184 192 192 192 162 184 184 184 184 184 160 160 160 162 160 162 184	211 2211 2233 2233 216 216 216 211 233 2233 2	36000 36000 40000 40000 60000 60000 45000 45000 45000 48000 33000 35000 36000 46000 46000 46000	13200 13980 12400 14250 15150 18900 18820 18900 13550 14000 15720 15800 16600 11400 11510 113050 13650 13650 13657 15456	8.25 / 20D 8.25 / 20D 8.25 / 20D 9.00 / 20D 9.00 / 20D 9.00 / 20D 9.00 / 20D 12.00 / 20D 12.00 / 20D 12.00 / 20D 12.00 / 20D 10.00 / 20D	10.00 / 20	Int RD450 GMC 4-71 GMC 4-71 Cum HRF68 Int RD501 GMC 6-71 Cum NH220 Wau 145G kB GMC 6-71 Cum NH220 Int RD501 GMC 6-71 Cum NH220 Int RD501 GMC 6-71 Cum NH220 Int RD501	6 47 475 4 4 47 475 6 5 1 476 6 6 4 47 45 6 5 1 476 6 5 1 476 6 5 1 476 6 6 4 47 45 6 6 5 1 476 6 6 4 47 45 6 6 4 47 47 45 6 6 4 47 47 45 6 6 4 47 45	284 743 501 426 743 501 426 743 501 426 744 801 306 377 400 400 407 426 747	15.5 16.0 15.5 16.0 15.5 16.0 15.5 16.0 15.5 16.0 15.5 16.0 15.5 16.0 15.5 16.0 15.5 16.0 15.5 16.0 15.5 16.0 15.5 16.0 15.5 16.0 16.0 16.0 16.0 16.0 16.0 16.0 16.0	375 580 444 570 607 595 570 607 444 570 607 444 286 308 308 407 444 570 607	150-230 190-200 227-225 220-210 240-240 227-225 220-210 212-300 212-300 212-300 212-300 165-320 175-320 175-320 217-255 220-210 212-30	Ful 5C85 Ful 5C72 Int T70 Ful 5C72 Ful 5C72 Ful 5C72 Ful 10A1120 Ful 10A1120 Ful 5C72 Ful 5C72	5 5 5 5 5 100 100 5 5 5 5 5 5 5 5 5 5 5	Own 6-23 Own 6-23 Own 6-33 Own 6-33 Own 6-23 Own 6-23 Own 6-23 Own 6-33AR Own 6-33AR Own 6-33AR	SF SF SF SF SF SF SF SF SF SF SF SF SF S	TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	4.7 11 4.7 11 4.7 11 4.7 11 4.7 11 5.7 8. 5.7 8. 5.7 8. 4.7 11 4.7 11
Marmon-Herr. T75	6 156 6 156				8 10/22.5D 8 11/22.5D	10/22.5 11/22.5	Ford Ford	8-311x311 8-311x311	33:	7.6	328	212-380 212-380	0 Cla 265 0 Cla 265V		Tim SFHD Tim SLHD	SF SF	H	** -7. ** -7.
Oshkosh W-825-6X (D) W-828-6X (D) WA-906-6X	8 178		45000 45000 65000	1900	0 11.00/20 0 11.00/20 0 11.00/24		Con R6602 Cum H6B Cum HRF6B	6-43/4x53/4 6-43/4x6 6-53/4x6	1	2	484	218-260 2 160-180	0 Own MT825 0 Own MT826 0 Own MT906	10	Tim SFD30208 Tim SFD30208 Tim SFD46008	2F		
Peterbilt (D) 35 (D) 36 (D) 38 (D) 350 (coe (D) 351 (coe (D) 360 (coe	1 194 1 135 1 190	Opt Opt Opt Opt	36000 44000 36000 36000	1320	10 00 000	11.00/22	Cum NHB600 Cum NHB600 Cum NHB600 Cum NHB600 Cum NHB600 Cum NHB600	6-51-x6 6-51-x6 6-51-x6 6-51-x6 6-51-x6 6-51-x6	74 74 74 74	3 17.0 3 17.0 3 17.0	500 500 500 500 500	200-210 200-210 200-210	0 Spi 8041 0 Spi 8041 0 Spi 8041 0 Spi 8041 0 Spi 8045 0 Spi 8045	12 12 12	Tim SW-459 Tim SFD4600 SW 3456	WF WF 2F WF	RRR	6.16 6. 6.16 6. 6.16 6. 6.16 7. 6.16 6.
Ree C-33 C-43 C-43 (6X6) C-44 (6X6) C-44 (6X6) C-45 C-53 C-53 A-63	2 150 0 150 2 150 6 150 0 150 2 150 0 155 6 155		37000 42000 43000 47000 43000 50000 50000	0 *1009 0 *1016 0 *1075 0 *1104 0 *1136 0 *1257 0 *1357 0 *1256	0 9/22.5 0 9/22.5 0 10/22.5 0 10/22.5 0 10/22.5 5 10/22.5 7 11/22.5 7 11/22.5 0 10/22.5	10/22.5 10/22.5 11/22.5 12/22.5 12/22.5 11/22.5 12/24.5 12/24.5 11/22.5	Own 0A145† Own 0A145† Own 0H1700	6-41;x41; 6-41;x41; 6-41;x41; 6-41;x41; 6-41;x41; 6-41;x41; 6-41;x41; 6-41;x41;	33 33 33 33 33 33 33	1 7.1 1 7.1 1 7.1 1 7.1 1 7.1 1 7.1	3 270 5 297 5 297 5 297 5 297 5 297 5 297 5 297	0 145-320 7 170-340 7 170-340 7 170-340 7 170-340 7 170-340 7 170-340 7 170-340	0 Cla 205V 0 Cla 205V 0 Cla 290V 0 Fu 5A85	40 40 40 40 40 40	Eat 28M Tim SLHD Tim SLHD Tim SLHD Tim SLD Tim SQD	SF SF HF HF HF2 HF2 SF SF HF	T T T T T T T T T T T T T T T T T T T	7.79- 7.79- 7.8-8. 7.8-8. 7.8-8. 7.67- 7.54- 7.62-8. 6.16-8.

For references and abbreviations see page 99

Continued on page 112

Filk

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Filko brings split-second Summertime starting to subzero hauls-with the first and only Heavy-Duty Coil guaranteed to ignore the weather for a million miles plus! Here's really weatherproof design . . . with supreme endurance, performance and low current draw efficiency that ends cold starting headaches for good. Exclusive

Filko features-like husky amounts of extra copper in windings, modern horizontal cooling fins, and insulation that provides 150% greater resistance to breakdowngive it the stuff and stamina you need to keep ignition at its peak all year 'round. For the complete "inside story," write for latest Filko Ignition Bulletin.

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Continued from page 110

	WHEI				TIRE	SIZES		ENGINE D	ETA	ILS			TRANSMISS	ION	RE	AR AX	LE	
MAKE	BAS	-	Weight			al rear gle rear											971	
MODEL	Minimum Standard	Maximum Standard	Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)	Standard Front and Rear	Maximum Authorized Tire Size (Duals unless noted)	Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Make and Model	Forward Speeds		Gear and Type	Drive and Torque	Gear Ratie Range in High
ix-Wheelers—Co	nt'd																	
Reo Cent'd A-6. (D) (c.o.e.) AC-83- (-o.e.) AC-83- A-7- A-7- A-7- AC-7- (D) B-630- (D) B-630- (D) B-32- (D) B-732- (D) B-	D 145 33 130 D 136 30 151 33 145 33 130 D 17934 D 17934 D 17934 D 18834 D 18834 D 18834		42000 42000 42000 45000 45000 42000 43000 43000 43000 48000 48000 48000	*12430 *12190 *12990 *12755 *13005 *13370 *13835 *13895 *14190 *15160 *15160 *15518	10/22.5 10/22.5 10/22.5 11/22.5 11/22.5 11/22.5 11/22.5 10/22.5 10/22.5 10/22.5 10/22.5 11/22.5 11/22.5 11/22.5 511/22.5 511/22.5	11/22.5 11/22.5 11/22.5 11/22.5 12/24.5 12/24.5 11/22.5 11/22.5 11/22.5 11/22.5 11/22.5 11/22.5 12/24.5 12/24.5 12/24.5 12/24.5	Own OV207* Cum JT6B Own OV207* Cum JT6B Own OV207* Own OV207* Own OV207* Own OV207* Own OV207* Cum NH30*	8-37,4x4 / 4 8-45,4x5 8-37,4x4 / 5 8-37,4x4 / 5 8-37,4x4 / 5 8-37,4x4 / 5 8-37,4x4 / 6 8-47,4x6 8-47,4x6 8-47,4x6 8-47,4x6 8-47,4x6 8-47,4x6 8-47,4x6 8-47,4x6 8-47,4x6 8-47,4x6 8-47,4x6 8-47,4x6 8-47,4x6	401 390 401 390 390 672 672 672 672 672 672 672	7.3 15.5 15.5 15.5 15.5 15.5 15.5 15.5	412 354 412 354 354 475 475 475 475 475 475	175-2500 207-3400 178-2500 207-3400 207-3400 207-3400 180-2100 180-2100 180-2100 180-2100 180-2100 180-2100 180-2100	Fu R46 Fu R46 Fu SA65 Fu R46 Fu R46 Spi 6452 Spi 6452 Spi 6452 Fu R630D Fu 5C72 Fu 5C72 Fu 5C72 Fu 5C72 Fu 5C72	8 8 8 5 8 5 5 5 5 5 5 5 5 5 5	Tim SLMD Tim SLHD Tim SLHD Tim SLHD Eat 38DP Eat 38DS Eat 38DS Tim SLHD Tim SLHD Tim SLHD Tim SLHD Tim SLHD Eat 38DS Eat 42M	HF HF HF SF SF HF HF SF SF HF SF SF HF2	***************************************	6.16-8.6 5.28-6.83 7.62-8.49 7.62-8.49 7.62-8.49 7.62-8.49 5.28-6.16 5.28-6.16 5.28-6.16 4.87-7.17 4.87-7.17 4.87-7.17
Truckstell (C) F600 (C) F700 (C) F750 (C) F750 (C) F800 (C) F900 (C) C5403 (C) C6103 (C) C7103 (C) C7103 (C) C9103 (C) C9103 (C) C10103	IR 157 IR 157 IR 157 IR 157 IR 158 IR 138 IR 156 IR 138 IR 158 IR 158	225 225 225 225 205 225 205 225 205 225	34000 48000 28000 32000 34000 48000	93504 93504 0 101704 0 116404 0 78504 0 78004 0 81704 0 83504 0 102504	8/22.5 8/22.5 9/22.5 10/22.5 11/22.5 8/22.5 8/22.5 8/22.5 8/22.5 8/22.5 8/22.5 8/22.5 8/22.5	9/22.5 9/22.5 10/22.5 11/22.5 11/22.5 9/22.5 9/22.5 10/22.6 10/22.6 11/22.5 11/22.5	Ford Ford Ford Ford Chev. Chev. Chev. Chev. Chev.	6-3.62x3 3-3.62x3.3 8-3.62x3.3 8-3.8x3.7 8-3.75x3 6-3.56x3.9 8-3.75x3 8-3.75x3 8-4x3.19 8-4x3.19	302 332 332 261 236 261 261 322	7.6 7.5 7.5 7.5 7.5 8.0 7.5 7.5 7.5 7.5 7.5 7.5	247 279 306 306 249 210 249 249 310	140 4200 155 4200 155 4200	Ford++ Ford++ Ford++ Ford++ Chev.++ Chev.++ Chev.++	12 12 15 15 15 12 12 12 12 15 15	Chev.	HF HF SF SF HF HF HF SF SF		** -8.8 ** -7.2 ** -7.2 ** -7.6 ** -6.1 ** -6.1 ** -6.1 ** -6.1 ** -7.1
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For references and abbreviations see page 99

Bad Brakes Blamed when Truck Races through Town at 80 mph

I NADEQUATE brakes and brake failure were blamed by the Interstate Commerce Commission recently for a runaway tractor-semitrailer that roared down Summit Mountain through Hopwood, Pa., at 80 mph. A state trooper cleared the way for the vehicle with his patrol car and no one was injured.

In a report on its investigation of the accident, the Commission found that the Mumby Oil Co. vehicle was "knowingly dispatched in an unsafe condition . . and in disregard for the safety and property of other users of the highway contrary to the public interest."

The incident occurred

in the early evening on the steep slope of Summit Mountain where U. S. Highway No. 40 descends into the town of Hopwood. The trailer was loaded with 41,518 lb of sugar, enroute from Baltimore to Chicago in alleged private carriage subject to the Motor Carrier Safety Regulations.

The report of the Commission declared that "only alert action by the highway patrolman prevented what might have been a very tragic accident." The patrolman saw the truck was in trouble and, by use of his flashing lights and siren, cleared all traffic from the highway.

The truck came

to a halt after traveling through the business district of Hopwood and up a grade.

After it left Baltimore, a flat tire was caused by overheated brakes and the driver "indicated to the service station attendant that the brakes had caught fire on one of the grades." When he 'iscovered that a rear brake drum of the trailer was badly cracked, the driver phoned his company. He was advised to remove the brake drum, plug the air line, and proceed without a brake on that wheel.

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its report, the Commission said, "The vehicle involved in this accident demonstrated an extreme condition of poor maintenance and its effect upon the public safety. It is the intention of the Commission to continue with its program of road checks."

COMMERCIAL CAR JOURNAL, January, 1959



announcing new and improved

ESSOLUBE® HDX

for longer mileage between overhauls

For the first time – a heavy-duty crankcase oil gives you this outstanding combination of lubricating advantages.

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New Essolube HDX now reduces to a new low the formation of high-temperature varnish deposits and low-temperature sludge ... gives anti-wear protection to heavily loaded engine parts ... offers new anti-corrosion properties to protect sensitive bearing

metals. Change to new Essolube HDX – in both your diesel and gasoline engines – and you'll get longer mileage between overhauls.

For more information on how this outstanding oil can bring savings to your operation, contact your nearest Esso office, or write: Fleet Engineering Service, Esso Standard Oil Company, 15 West 51st Street, New York 19, New York.



In Industry after Industry..."ESSO RESEARCH works wonders with oil"

COMMERCIAL CAR JOURNAL, January, 1959

REPLACE WITH LONG-LIFE PACKARD CABLE NOW

A complete Packard re-wiring job probably costs less than a single breakdown on the road. That's why many fleet owners give their maintenance departments standing orders to replace immediately any suspected electric wiring with new Packard Cable.

Why Packard Cable? Because its specially developed insulation is built to ward off all the natural enemies of cable that are always present. Packard insulation resists abrasion, yet maintains cable flexibility. It fights oil and acids without

ever giving in to them. And most types of Packard Cable will never burn—its insulation simply will not support combustion.

For more miles of service at less cost, replace with new Packard Cable—so dependable that it is original equipment on more cars, trucks and buses than all other makes combined! And it is the choice of the big majority of transportation maintenance award winners year after year! Packard Cable is available everywhere through the United Motors System.

There's a Packard Cable for every fleet need



This exclusive Packard ignition cable suppresses radio and TV interference. It is original equipment on millions of vehicles.

T.V.R.S. CABLE

Long the leader, this Packard-developed high-tension cable is used on more vehicles than any other, except for Packard T.V.R.S.



"440" IGNITION CABLE



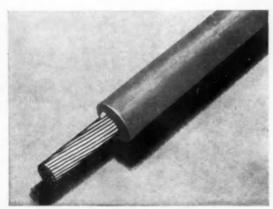
An exclusive Packard low-tension cable that is compact, flexible and has a highheat insulation that even steam cleaning can't harm.

ENGINE COMPARTMENT

Specially designed by Packard to deliver full starting power, resist acids and corrosion, and make replacement easier.



BATTERY CABLE



PACKARD SUPER DUTY CABLE IS REALLY TOUGH

Designed to take the extra punishment that comes with exposed wiring conditions, Packard Super Duty Cable delivers a longer service life. Its extra heavy plastic insulation is unaffected by water, road splash, sunlight, oil and age, and will not support combustion. Stands up under abrasion and knocks to lessen your operating costs.

Whatever your cable needs, you can get them from one source when you deal with Packard, world's largest producer of automotive cable. It's the original equipment line used more than all others combined.



"Live Wire" division of General Motors

Alaska

Continued from page 75

Which leads us

right smack into the construction industry with its Morrison Knudsen and Peter Kiewit branches along with other well-known names. There are 19 general contractors listed in Fairbanks alone, just to give an idea of the activities.

Yet you get the impression that most are waiting. The big military jobs—outside of two new anti-missile bases—are almost done. The next big job is the coming industrial expansion.

And there's our

parting note. As I mentioned in the November issue (page 5), Alaska today can be likened to the United States in 1776. With statehood there is little question that it will come into its own as our biggest new frontier. Already building is a giant pulp mill at Sitka, a brewery in Anchorage and a steel rolling mill in Fairbanks. Those are but a few examples.

With the industrial expansion will come more jobs, more workers, more "support" services and more families. With them will come many new highways, although they won't be easy ones. There are mountain and water barriers everywhere. But the planners are busy.

One of the first

jobs will be a highway link between Haines and Juneau to link the capital to the population center. On the drawing board is a new highway just back of the coastal mountain range from Prince Rupert to Haines with through-the-mountain links to Ketchikan, Juneau and their coastal ports. Some day Nome may well be joined.

All of this will take time. But it's on the way. And with the development will come a great, great many more trucks. And they will all be a part of our heritage—the trucking industry, U.S.A.

END

Please Resume Reading Page 76

Lightweight Diesel



The Cerlist Model No. three diesel engine is the first of a line of five models of two-cycle diesels ranging from 55 to 225 hp. Model No. three is rated at 85 hp at 3000 rpm. Net weight of the engine is 605 lb. It has no valves. Ports handle both intake and exhaust gases. An unusually flat torque curve produces a useful speed range of 1000-3000 rpm with no-load idling of 500 rpm.

ONE BRAND

ONE LINE

COMPLETE line for all applications TULSA POWER TAKE-OFFS

The complete line of Tulsa Power Take-Offs means one brand — one inventory — of highest quality, top performance power take-offs. Our ten series — and the many models within these series — provides a power take-off for all types of work and for most transmission applications. Application information for all trucks is revised annually—or more often when necessary — and is available when new truck models are released. For a complete line — with maximum interchangeability — it's Tulsa Power Take-Offs!

Tulsa Winch

DIVISION OF VICKERS, INCORPORATED . TULSA, OKLAHOMA





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Hein-Werner's 4-ton "GG" is a powerful, dependable service jack that handles any vehicle in your shop, from a passenger car right up to a medium heavy truck. The long, sleek chassis is extra sturdy; easier to maneuver. Rapid automatic speed pump with pivoting hydraulic unit responds instantly for fast, dependable lifting from 4" to 24". Large white swivel saddle permits easy spotting under load. Full 90° stroke handle. Positive action release valve. Proven Hein-Werner "Quality First" performance.



HEIN-WERNER "X" 10-TON HYDRAULIC SERVICE JACK

safely lifts heavy-duty trucks, trailers and buses

Features include: overload valves and rugged steel construction for maximum safety and stability; roller bearing wheels and ball bearing casters for easy maneuvering and dollying; long, low design; three position handle plus foot pump to speed contact; requires less handle effort.

Keep your shop up-to-date with Hein-Werner. Remember, Hein-Werner manufactures and sells more hydraulic jacks than any other company in the world. See your Hein-Werner jobber for full details, or write us. Ask about purchasing on easy time payments.



The complete Hein-Werner line includes: The famous "55" and "Screwball" . . . Under-Axle Jacks of 1½ to 100 ton capacity . . . "Bumper-Liff" and Ratchet Jacks for passenger cars . . Service Jacks for shop use . . . Transmission Jacks . . . Adjustable Car Stands . . . "Push and Pull" and "Pushmaster" jacks for body, fender and frame repair work.

This is next. Louis Isabella explains job details to Standard's Jerry Bushman. Isabella's contract covered concrete paving of 26 miles of 24 ft. single lane highway plus interchange connections. When complete, Highway 41 in Wisconsin will be a divided lane freeway.

How Standard Oil serves a contractor

Case example:

What happened when Isabella Construction got U.S. Highway 41 paving job near Milwaukee

When N. M. Isabella, Inc. set out to put down 26 miles of pavement on U.S. Highway 41, they met Standard Oil's Jerry Bushman, an experienced automotive lubrication specialist. Jerry was ready right then to provide technical assistance on the job.

The contractor next learned about Standard Oil service when two Standard agents went into action. One agent, they found, was based at Slinger, only three miles away. Another agent was located at Allenton, only five miles from the part of 41 to be paved. These agents set up delivery schedules to the job, and meanwhile, Jerry Bushman arranged for fuel storage and pumping equipment.

Isabella put down 363,000 square yards of paving, averaging 1,600 feet of production daily. They got the job done because they were backed by the kind of service they, and their subcontractors, received from Standard.

Standard has 3,900 agents in the 15 Midwest and Rocky Mountain states ready to serve contractors in the same way these two agents served Isabella. Lubrication technical service comes from qualified, trained men located in Standard's 48 district offices. Get this kind of help on your job. Call the Standard office nearby or write to Standard Oil Company (Indiana),910 S. Michigan Ave., Chicago 80,111.

Standard Oil Petroleum Products used by N. M. Isabella, Inc.

STANOLUBE S-1 Motor Oil

STANDARD RED CROWN Gasoline

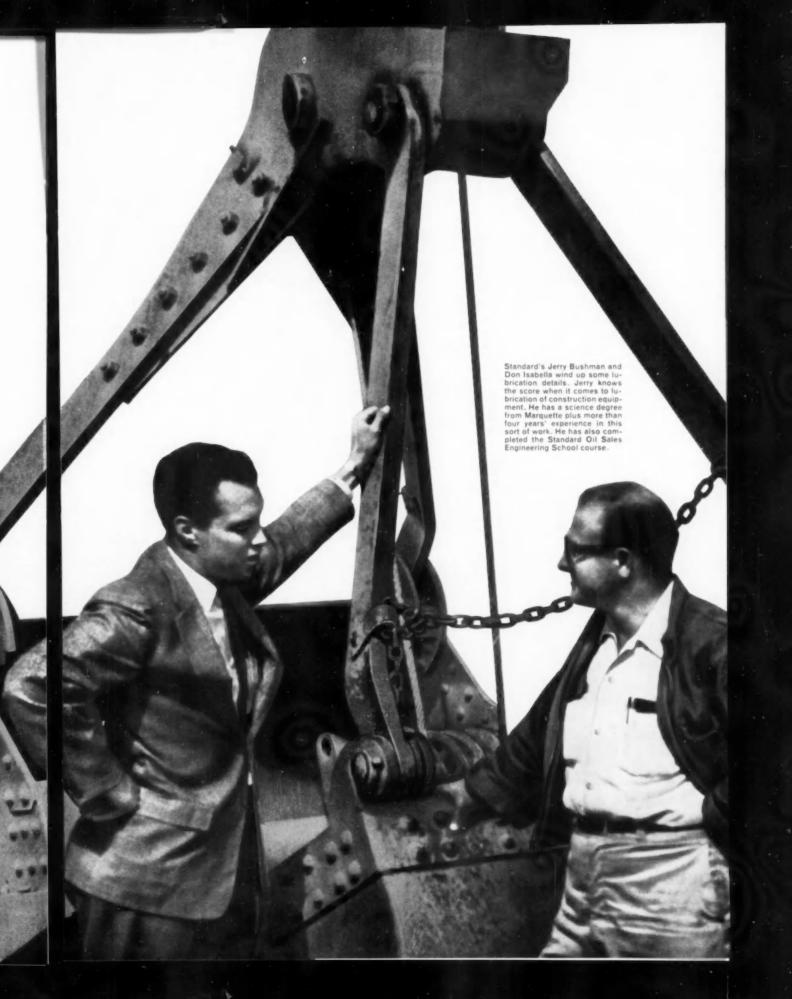
STANOLEX Diesel Fuel

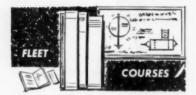
Amoco Lithium Multi-Purpose Grease

You expect more from (STANDARD)



and you get it!





HERE is an up-to-date calendar of fleet training courses for 1959. For complete addresses to write to for further information concerning the courses listed, see the Fleet Course Directory beginning on page 118 of the November issue.

Driver Trainer

Pennsylvania State University— Sept. 28-Oct. 2.

Fleet Maintenance

University of California — March 11-13 (Los Angeles), 18-20 (Berkeley). (Both are conferences.)

University of Washington-March 23-25 (Conference).

Pennsylvania State University — Apr. 27-May 1.

Fleet Operation

Fleet Operation courses usually meet one night a week for 10 or 12 weeks. Starting date, where known, is indicated below. City shown in parentheses is where course will be held.

Syracuse University (Syracuse, N. Y.)—Feb. 11.

Northwestern University (Evanston, Ill.)—Feb. 23.

West Virginia State College (Institute, W. Va.)—February.

Fleet Supervisor

University of Alabama—Jan. 19-23.
University of Utah—Feb. 9-13.

University of California (Los Angeles) — March 9-10 (Berkeley) — March 16-17. (Both are Conferences.)

University of Oklahoma — March 23-27.

University of Washington — Apr. 6-10.

Northwestern University—June 22-26.

Top Management Conference

Pennsylvania State University — May 7-8.

Terminal Management

University of Oklahoma-Jan. 19-23.

Pennsylvania State University — Oct. 5-9.

Evening Courses

The following evening courses are offered by Northeastern University, Boston, Mass. Most of them meet one night a week. Dates show beginning and end of course.

Transportation Practices—Jan. 27-May 19.

Current Transportation Probelms —Jan. 26-May 18.

Motor Carrier Operations—Jan. 27-May 19.

Terminal Operations—Jan. 29-May 21.

Traffic Management—Jan. 27-May 19.

Freight Claims for Loss and Damage—Jan. 29-May 21.



engine performance when properly vaporized, carburetted and thoroughly mixed with air in the correct ratios for every load and speed — idling, acceleration and wide open throttle. Ensign engineers with their engine dynamometer laboratory, one of the finest in the nation, have consistently through nearly half a century improved carburetor performance in gasoline, natural gas and LP-Gas engines. Whether you are an Original Equipment Manufacturer, a truck or LP-Gas dealer, you can count on Ensign LP-Gas carburetion for the finest, most consistently dependable performance known in the industry today. INSIST ON ENSIGN —



LP-GAS CARBURETOR

LP-GAS FILTER

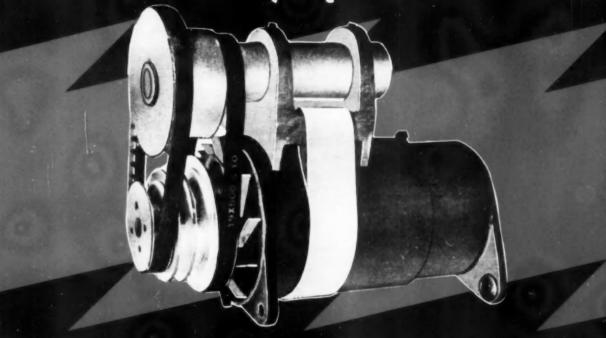
LP-GAS

VAPORIZER-

ENSIGN CARBURETOR COMPANY

ACCEPT NOTHING LESS!

1551 E. Orangethorpe, Fullerton, California Branch Factory: 2330 W. 58th Street, Chicago, Illinois Peak generator performance at any speed...



GEN-O-DRIVE

GENERATOR OVERDRIVE

PATENT NO. RE. 24309 Other patents pending

Gen-O-Drive generator overdrive attached to any automotive generator, assures maximum electrical current at any engine speed! Even at low speeds or curb idle, Gen-O-Drive produces all the "amps" your generator has to offer—keeps batteries at full charge, prevents costly down-time and repair calls. Eliminates the need for "engine racing" when accessory equipment is in use. And once installed, Gen-O-Drive does its job well and keeps on doing it, mile after mile ... without maintenance!

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CONSOLIDATED GENERAL PRODUCTS, INC.
Box 7425 * Houston 8, Texas

Please rush me complete information on your new Gen-O-Drive.

Firm_____

Address____

City_____State___

Requested by ______ Title_____

SENSATIONAL NEW GEN-O-DRIVE ASSURES

Constant Battery CHARGE

even at idle and low speeds!

Fleet vehicles—owned by dairies, bakeries, utilities, department stores, service companies and other metropolitan users; wreckers, ambulances; passenger cars in stop-and-go traffic; fork lift trucks and other industrial equipment; radio-telephone equipped vehicles; air-conditioned vehicles; all maintain fully-charged, efficient batteries with Gen-O-Drive equipped generators.

With Gen-O-Drive, maximum current availability is coupled with constant voltage regulation. No sudden surges of high voltage to damage electrical or electronic components. Prevents overcharging, adds months of extra battery life.

maintain more efficient schedules, even after daily "door to door" stops and heavy traffic driving.

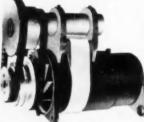




benefit from sufficient current to operate all accessories . . . always!

RADIOTELEPHONE CARS . . . operate with batteries at peak efficiency even during long periods of idling.





GUARANTEED to make generators perform better! Gen-O-Drive is guaranteed for a period of 90 days or 4,000 miles, whichever occurs first; the same guarantee as that issued on the vehicle on which it will be used. Should the unit or any of its working parts fail within the prescribed time, replacement will be made without charge.

FILL IN CARD BELOW! GET FULL DETAILS ON GEN-O-DRIVE!

FIRST CLASS PERMIT No. 1456

Houston, Texas

BUSINESS REPLY CARD

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P. O. BOX 7425 HOUSTON 8, TEXAS

GEN-O-DRIVE Patent No. Re. 24309 - Other patents pending GENERATOR OUTPUT COMPARISON MAXIMUM CHARTS AMPERES 35 STANDARD GENERATOR DISCHARGE CHARGE 0 55 DISCHARGE HEAVY DUTY GENERATOR CHARGE 0 90 DISCHARGE AC GENERATOR CHARGE 35 55 GEN-O-DRIVE ON ALL GENERATORS CHARGE 30 MILES PER HOUR

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MAIL CARD TODAY!

Gen-O Drive is manufactured by DRIVES, INC.

DISTRIBUTED THROUGHOUT THE WORLD BY

CONSOLIDATED GENERAL PRODUCTS, INC.

P. O. Box 7425 . Houston 8, Texas



Fuel pressure regulators are explained in a question-answer type pamphlet from Milemaster, Inc., 1550 E. 74th Place, Chicago, Ill. Called "The Truth About Fuel Pressure Regulators," it answers many questions about pressure regulators, their types, applications and benefits. Write for a free copy.

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Telescopic hoists are shown in new literature from Daybrook Hydraulic Div., Young Spring & Wire Corp., Bowling Green, Ohio. Described and illustrated are Series 3B and 3C hoists for dump truck bodies and Series T-3C, T-4C and T-4D for trailer dump bodies. Complete data on specifications, applications and hoist ratings are featured. Copies are free at the above address.

LP Gas appliances for Prest-O-Lite soldering, heating and brazing equipment have been announced by Linde Co., Division of Union Carbide Corp., 30 E. 42nd St., New York 17, N. Y. A free six-page illustrated booklet is available from any Linde office or local Linde supplier. Ask for Form No. F-1165.

Du Mont EnginScopes and Ignition-Scopes are described in two new brochures from Allen B. Du Mont Laboratories, Inc., 750 Bloomfield Ave., Clifton, N. J. "Nine Out of Ten" describes the major features of the scopes as compared with other manufacturers' equipment. "Be the Best" shows application photographs and testimonials from users. Fleets interested in engine test equipment should write for free copies.

High pressure hose assemblies, couplings and clamps are described in four new brochures from Eastman Southwest Hose and Couplings, 100 Manufacturing St., Dallas 7, Tex. Shown are many applications for high pressure lines and accessories, as well as the wide range of Eastman products designed for all uses. Fleets with hydraulic-powered equipment and tools should write for Technical Bulletin No. 200 at the above address.

Welding supplies and accessories catalog describes the Airco line of welding products. Also included in (TUBN TO PAGE 126, PLEASE)



Tell Your Recapper to Use MOTRUCK Tread Rubber

Motruck is made for truck tires!

It's a truck tire formula, developed especially for heavy duty service. In fact, the more severe the service, the better Motruck performs! And it costs only pennies more per pound.

25 to 30% more mileage.

Test after test, on fleets of all types, has proved recaps with Motruck last up to 25 to 30% longer. Compared to new tires, Motruck equals, and often surpasses, the original miles!

Resists chipping and snagging.

Motruck tread rubber is made from the finest materials available, including the newest, finer particle carbon black. The result is a tread that not only lasts longer but one that resists cuts, snags and chipping.

Lower your cost-per-mile.

Tell your retreader you want your truck tires recapped with Mohawk Motruck tread rubber. If he isn't using it now, he can get it for you.



MOHAWK

THE MOHAWK RUBBER COMPANY Plants in: Akron, Ohio • Helena, Ark. • Stockton, Calif.

Recognized by retreaders everywhere for linest quality tread rubber and repair materials



Lower Battery Drain—No need now for heavy duty batteries and generators. Current drain on "stand-by" is 1/3 that of tube-type receivers, 1/15 with battery saver switch.

Greater Reliability — Transistors, printed circuits and new design all greatly increase reliability.

Smaller, Lighter—Approximately 1/2 the weight, 1/3 the size of other models. Mounting in tight quarters easier than ever.

Completely transistorized receiver and power supply... Another Motorola First!

Here is 2-way radio with efficiency and reliability never before approached in mobile radio. No more tubes in the receiver—no more vibrators in the power supply . . . all are replaced by long life, dependable transistors. No longer is it necessary to idle the vehicle to keep the radio operating. Savings in gasoline, engine wear and batteries add up fast. Let us prove to you how MOTRAC radio will cut your radio operating costs . . . while giving you reliability never before possible. Write today.



MOTOROLA 2-WAY RADIO

Motorola Communications & Electronics, Inc. • A Subsidiary of Motorola Inc., 4501 Augusta Blvd., Chicago 51, III.

MOTRAC is a trademark of Motorola Inc.

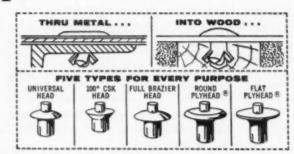


"I'll tell you why we insist on Drive Riveted linings in all our new equipment too..."

"It's because they require no servicing. You don't have to go over the interior periodically to tighten up the fasteners. Southco Drive Rivets stay tight.

"And big PLY-HEAD drive rivets never crush the plywood and work loose.

"You can put them in fast, too. On new or repaired equipment we want Southco Drive Rivets."



Southco Division, South Chester Corp., 228 Industrial Highway, Lester, Pa.

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FASTENERS IMPROVE TRUCK BODY,
TRAILER AND BUS CONSTRUCTION

HONE YOUR LOCAL SOUTHCO DISTRIBUTOR



GETS THE JOB DONE!



Pet. Nos. 2,770,487-2,805,097

Immediate Delivery

1947-59 Auto Car

1947-59 Chevrolet

1948-59 Dodge

1954-59 Diamond "Ts"

1948-59 Ford

1954-59 GMC

1954-59 Internationals

1950-59 Macks B & D Models

1951-59 Reo

1941-59 Studebaker

1952-59 White (3000 Series)





Barber's DeLuxe S-L-I-D-I-N-G Rear Truck Windows answer the many problems . . . Give Drivers full-view rear work opening to operate winch controls, straighten cables, true air conditioning without refrigeration and hear instructions . . . Gives Management a Faster, Safer Job.

- Fits original rear cab opening! Installs in just 20 minutes!
- Locks when closed!
- Completely Weather Proof!

Tempered (heat treated) Safety Glass is now used in all Barber's Deluxe sliding rear windows for trucks.

P.S. This glass is unconditionally guaranteed against breakage for a period of one year.

Now new G. M. type setting rubber is used for easier and faster installation.

When ordering please include make, model and year. Installation instructions with each unit. Overnight delivery to many areas.

Also Units Available for Crew (Cabs) Shelters, Sleepers, Flat Backs, Station Wagon, Sedan Delivery, Panel Trucks and Units Made to Order.



Mfg. Literature

Continued from Page 123

the 52-page catalog is a complete line of protective clothing and safety equipment. Get a copy by writing Air Reduction Sales Co., Div. of Air Reduction Co., 150 E. 42nd St., New York 17, N. Y. Specify Form No.

Hydraulic press manual describes the ACCO line of manual and airoperated hydraulic presses-from the three-ton mechanical arbor press to the 25- to 150-ton units. Write to ACCO Equipment Div., American Chain & Cable Co., York, Pa. Ask for Bulletin No. DH-126.

Hydra-Drive Power Shift Transmissions are described in a booklet from the Rockwell-Standard Corp., Transmission and Axle Div., Detroit 32, Mich. The booklet shows the advantages of heavy-duty torque converters coupled to Power Shift transmissions for use in heavy-duty offhighway equipment. Ask for Form No. SP 5804.

Molub-Alloy All Purpose Grease is offered in free sample tubes, together with a new brochure, by the makers of Molub-Alloy Industrial Metallic Lubricants. Write to Imperial Oil and Grease Co., 6505 Wilshire Blvd., Los Angeles 48, Cal., for a free sample.

General shop tools are described in the fall catalog supplement from the K-D Manufacturing Co. Included are a distributor-carburetor adjusting set, a door handle spring remover, brake shoe spring tools, and a piston ring expander set. Write to K-D Mfg. Co., Lancaster, Pa., for a free copy.

(TURN TO PAGE 130, PLEASE)

Lightweight LP Gas Trailer



This new Hackney LP gas trailer was recently introduced at the LPGA show in Chicago. It has a payload capacity of 7635 gal of propane at 60 deg F. Empty weight of the trailer is 19,880 lb. The new units are made at the Downingtown Iron Works Division of Pressed Steel Tank Co.

In the automotive service business...THERE'S NO BUSINESS LIKE CHEVROLET BUSINESS!

INDEPENDENT GARAGE OWNER:

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"Chevrolet parts help me keep my customers happy and keep installation time to a minimum."

CHEVROLET PARTS MANAGER:

"Yes, Genuine Chevrolet Parts are designed to last and designed to fit properly."

Here's why there's no business like Chevrolet business:

- 1. Over 16,000,000 Chevrolet cars and trucks on the road ... more than any other make.
- Your Chevrolet dealer can be your one-stop source for genuine Chevrolet parts.
- Genuine Chevrolet parts are built of the same quality materials and to the same rigid engineering specifications as the originals.
- Your Chevrolet dealer can offer profit building service aids to help you serve Chevrolet owners.

CHEVROLET DIVISION OF GENERAL MOTORS, DETROIT 2, MICHIGAN





MAKE YOUR CHEVROLET DEALER YOUR PARTNER IN SERVICE
...HE IS READY, WILLING AND ABLE TO SERVE YOU!



...as "checkmate" is the last word in a chess game ...

SO ERIE IS THE LAST WORD IN WHEELS...

TOUGH

RESILIENT

EASIEST MAINTENANCE

BRAKE DRUMS

AUTOMOTIVE WHEEL DIVISION ERIE MALLEABLE IRON CO., ERIE, PA.

128

See and



Try one in your own shop ...

for general automotive work, the No. 100 and for tough truck lugs, the No. 300.





Black & Decker

Quality Electric Tools . . . Power-built to set the pace

See and try new B&D tools at I.A.S.I. Show, Booths A-114 to A-120; B-113 to B-119.

Thousands of B&D Impact Wrenches have been sold...few serviced. Records of Black & Decker Service Branches reveal that the No. 100 and 300 Impact Wrenches are virtually strangers to them.

We expected these tools to stand up like this. They were built to withstand the great strain, the high impact stress common to impact wrenches—long known as high-maintenance tools. Before a single B&D Impact Wrench was sold we torture tested impactor springs by compressing 'em 100 million times; ran tools continuously over 600 hours.

Try'em both. Mail coupon for free demonstration.

18 ft Boyertown Merchantvan

Higher cubic capacity, increased load accessibility and greater maneuverability are the leading features of the 1959 Boyertown 18 ft Merchantvan. With an 862 cu ft capacity measuring 216 in. long, 88½ in. wide and 78 in. high, the new unit is designed especially for delivery fleets handling furnitrue, appliances and other bulky cargoes. Three types and sizes of optional rear and side door combinations are available. Hydraulic tailgate is also offered.



Proved 125,000,000 Times!



BENDIX STARTER DRIVES

For nearly fifty years—and in well over 125,000,000 automotive installations—the Bendix* Starter Drive has been proving itself the best performing drive in its field. That's why most fleet owners specify genuine Bendix Starter Drives and parts whenever starter drive service is required. They know that good service and dependable performance are essential in order to meet competition—and that, in starter drives, the best by far is Bendix. Order by name from your distributor.

Bendix-Elmira

Eclipse Machine Division Elmira, New York



Mfg. Literature

Continued from Page 126

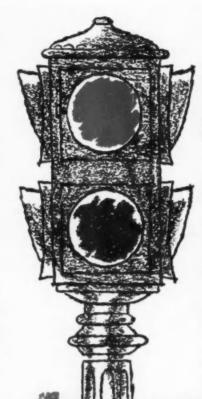
Plastic safety lamp is illustrated and described in a recent two-color sheet from Warren Mfg. Co., Warren, Pa. Shown is the company's Starline Model No. D-5 Safety Lamp. Write for your free copy.

Electronic motor freight accounting system is shown in a circular from Remington Rand. Shown is the Univac File-Computer system to speed preparation of operating statistics and the processing of accounting records. The system is designed specifically for trucking industry use. Request Circular No. U-1532 and U-1555 from any Remington Rand branch office or by writing the company at 315 Fourth Ave., New York 10, N. Y.

"Ford trucks in Fire Fighting Applications" shows the various Ford models suitable for fire equipment bodies and pumps. Shown and illustrated are Fords equipped with over 25 different makes and models of fire fighting bodies. Write Truck Div., Ford Motor Co., Dearborn, Mich., for a free copy.

Reefer insulation booklet explains insulation problems. Some of the topics covered are, how to stop air infiltration, and, recommended air barrier treatment. Booklet also describes the various types of materials available for reefer insulating. Get your copy by writing the Armstrong Cork Co., Dept. EQ, Lancaster, Pa. Ask for Booklet No. ED-2-958M.

Nineteen hundred fifty-nine automotive filter wall chart shows oil, air and fuel replacement filters for cars and light trucks. Write Purolator Products, Inc., Rahway, N. J. Back of chart has cross reference between Purolator refill numbers and 13 other filter makers.



GO with

11/00°

GO with lightest weight...

GO with greatest payload...

GO with lowest first cost...

GO with lowest maintenance cost...

GO see your REYCO dealer!

"30" series



ACTUAL WEIGHT AS LOW AS 614 LBS.

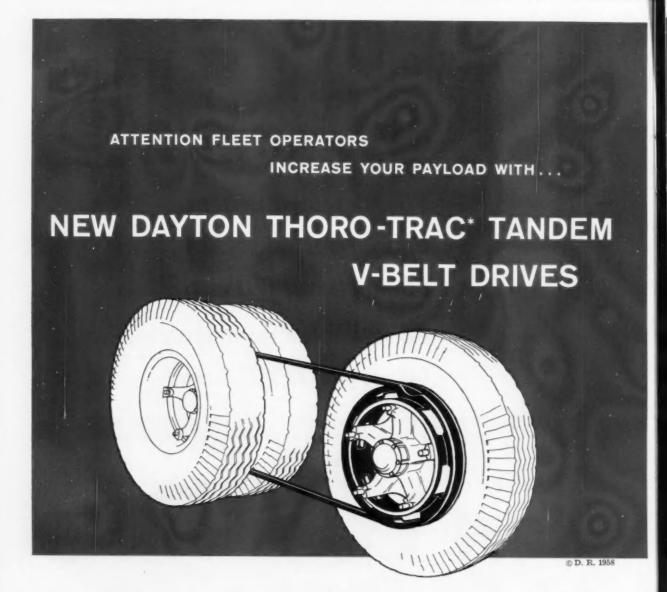
SALES AND SERVICE NATION-WIDE

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COPYRIGHT 1959 REYNOLDS MEG. CO

REYNOLDS MANUFACTURING CO.

SPRINGFIELD. MISSOURI



Increasing mileage, increasing traction, increasing payload, all at a lower cost

Now, with the new Dayton Thoro-Trac Tandem V-Belt Drive, you can have dual tandem power without the extra cost and extra weight of a second drive shaft.

Your dead axle, whether it's leading or trailing, becomes a part of the tandem team... automatically doubling your traction with 8 instead of 4 wheels driving.

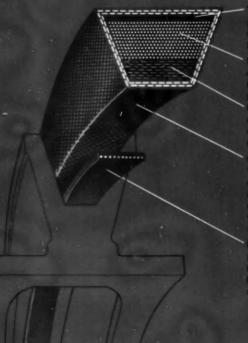
Making the conversion to the new Dayton Thoro-Trac Tandem V-Belt Drive is surprisingly simple. All you have to do is replace the rim spacer with a Dayton Thoro-Trac Tandem V-Belt Drive. The Dayton Sheave is a solid one piece casting with a notched Sheave groove for easy application of the V-Belt. No tools are needed. Just start the Thoro-Trac V-Belt and rotate the wheel until the V-Belt is fully seated. Then replace the outside wheel. You'll increase your tire mileage . . . double your traction . . . and equalize braking effectiveness.

Lightweight and economical, the Dayton Thoro-Trac Tandem V-Belt Drive gives you extra pulling power without sacrificing payload capacity. You actually save up to 1000 lbs. in dead weight represented by the extra Gross Vehicular Weight of other type tandem drives.

Just compare these operating advantages . . . less wheel spin and tire scuffing, less danger of side slippage, more pulling power, equalized braking for added safety. They're all yours at a lower cost with Dayton Thoro-Trac Tandem V-Belt Drives.

Requiring the absolute minimum in maintenance, New Dayton Thoro-Trac Tandem V-Belt Drives are available for all 20" and 22" Spoke Wheels and for 6, 8, and 10 hole Disc Wheels. See your Dayton dealer today and discover how little it costs to convert your fleet for greater tire mileage and traction with Dayton Thoro-Trac Tandem V-Belt Drives.

V-Belt Especially designed for Tandem Drives



Tension Section - Live, heat-resistant rubber compounds permit heading without straining and cracking. Less heat is generated, belts run cooler, last, longer.

Strength Section All-new high tenacity synther, cords themically bonded in rubber provide high flex strength, about abook loads and give greater resistance to fatigue.

Compression Section Tough three, embedded laterally in special rubber compounds, give great crosswice rightly, allows flexibility, prevents squashing in the shelve grooves

Cowk - Tough prefective outer cover is made of "High Twist" in their impregnated fabric. It was originally developed for ragged all-weather V-Rein service on radiroad pullman under-car generator drives. Millions of service miles under the most tortuous drive conditions have proved the longer wearing qualities of this superior V-Reit cover.

Descri Sand Made of rugged synthetic cord impregnated in top quality flexible compounds. Firminates the possibility of ice or snow build-up in the groove, thus assuring a maximum belt grip at all times.

Two to three times the tire life on your wheels Requires little maintenance Equalize braking, smoother ride, less driver fatigue

Better fuel mileage over other type tandem drives

Less spinning and tire scuffing

More payload than other tandem type drives Eliminates side slippage for safer driver comfort Twice as much traction

Dayton Rubber



Dayton 1, Ohio

Tandem V-Belt Sales, The Dayton Rubber Co., Dayton 1, O.

Gentlemen: I would like more information on Dayton's new Thoro-Trac Tandem V-Belt Drives. Flease send me folder A-3172-58.

Name

Address

City

State

Jan. News Roundup

Continued from Page 97

lander, Manager of Research and Development for Pinney Dock and Transport Co.

Lots of PM in 3 Days

SEATTLE, WASH .- Mark on your calendar Mar. 23, 24, 25. That's when University of Washington holds its Maintenance Conference. Discussion sessions are divided two ways-into subjects and into vocational groups. For details, write Fred H. Rhodes, Jr., Civil Engineering Dept., University of Washington, Seattle 5, Wash.

Know a Good Safety Man?

CHICAGO-Know a good safety man? Nominate him for the 1958 Marcus A. Dow award. You can get full details from Paul H. Coburn, National Safety Council, 425 North Michigan

Ave., Chicago 11, Ill. Official nominating blanks have to be in by April 1. 1959. Generally, to be eligible, your nominee must have (1) at least five years' fleet safety experience, (2) contributed safety articles to fleet magazines. (3) participated in safety organizations, (4) produced betterthan-average results safetywise in his own fleet.

1958 Truck Trailer Shipments

Type of Trailer	October	Ten Months
Vans		
Insulated and refrigerated	312	2.853
Steel	15	286
Aluminum	297	2,567
Semi-insulated	50	457
Steel	18	407
Steel		457
Aluminum	32	4 004
Furniture		1,291
Steel	93	1,291
Aluminum	19	1,201
All other closed-top	2.066	14.036
Steel	641	4,596
Aluminum	1,425	9,440
Open-top	357	1,879
Ctest Ctest	99	874
Steel		
Aluminum	258	1,780
Total-Vans	2,897	20,516
Tanks		
Non- and low pressure		
Petroleum		
Carbon and alloy steel	255	1.916
Stainless steel	28	188
Aluminum	143	1.173
Total—Petroleum	426	3,277
Total Ten oream.	420	3,611
Chemical, food, fluid solids	21	468
All other, incl. aircraft	41	400
All other, incl. aircraft	0.0	
refuelers, High pressure (LPG),	25	377
High pressure (LPG),		
chemicals, etc.	43	276
Total Tanks	515	4,398
m. t		
Pole, pipe and logging		-
Single axle	27	279
Tandem axle	52	470
Total	79	749
Platforms		
Racks, livestock and stake	80	1.177
Grain bodies, all types	103	836
Platforms (flats), all types	711	5.142
Finition in the state of the st	111	3,192
Total - Platforms	894	7.155
Law had bearn hardens	101	0.004
Low-bed heavy hauters	191	2,024
Dumo trailers	223	2,125
All other trailers	190	1,659
Total Complete Trailers	4,969	38.626
Tomi Samples Flatters,	41,000	00,020
Trailer chassis	262	2,715
Total—Trailers and Chassis	5,251	41,341

Source: Industry Division, Bureau of the Census.

Steel	18	457
Aluminum	112	1,291
Steel	93	4
Aluminum	19	1,291
All other closed-top	2,066	14,036
Steel	641	4,596
Aluminum	1,425	9,440
Open-top	357	1.879
Steel	258	1.780
Aleminem	230	1,700
Total Vans	2,897	20,516
Tanks		
Non- and low pressure		
Petroleum	400	
Carbon and alloy steel		1,916
Stainless steel	28 143	1.173
Aluminum	143	1,1/3
Total—Petroleum	426	3,277
Chemical, food, fluid solids	21	468
All other, incl. aircraft		
refuelers.	25	377
High pressure (LPG),	43	276
chemicals, etc.,	43	2/6
Total Tanks	515	4,398
Pole, pipe and logging		
Single axle	27	279
Tandem axle	52	470
Total	79	749

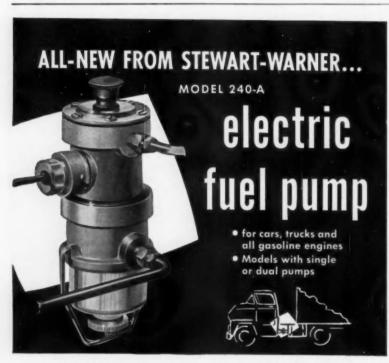
Driver Ed Courses Grow

WASHINGTON, D. C .- During the last school year, 1957-58, some 12,177 driver education cars were used in high school courses. This is a new high. Most of the cars-8,676-were on free loan from car dealers. Of the balance, 1,522 were purchased by the schools, 659 were rented or leased, 102 on free loan from sources other than car dealers.

Diesel Starters Tour U. S.

SPRINGFIELD. MASS .-- American Bosch is going to tour the country demonstrating its hydraulic diesel

(TURN TO PAGE 140, PLEASE)



FOR INSTANT STARTS ... AND CONSTANT, POSITIVE FUEL FLOW BOTH WINTER AND SUMMER!

Highest delivery rate! Up to 60 gallons per hour, with oversize piston, coil and power spring.

Adjustable pressure! Pump can be easily adjusted from 1 PSI up to 71/2 PSI to give exact shut-off pressure required by any carburetor.

Built-in automatic pressure regulator! Prevents flooding and starving. Maintains desired pressure at carburetor . . . gives smooth, steady fuel supply ... eliminates surging.

Built-in fuel filter! Extra-large reservoir and oversize filter element.

Easy wiring and installation! Battery can be either positive or negative ground.

Serviceable in field! Routine maintenance - even complete overhaul - can be done by your own service person-

Minimum inventory! Just two models -6-volt and 12-volt.

See your wholesale supplier for details!



CORPORATION

1840 Diversey Parkway Chicago 14, Illinois



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59

We built a North Pole to make sure TIMKEN bearings roll the load at 60° below

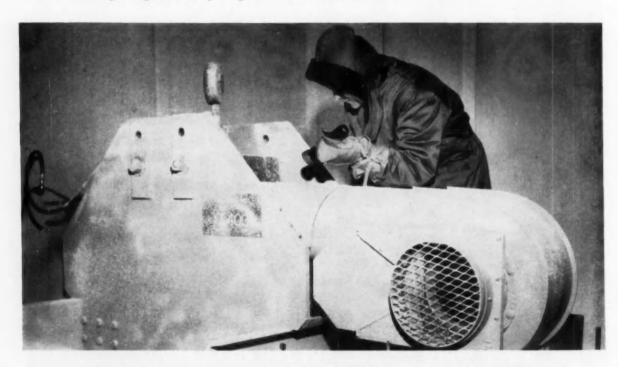
(Another reason why TIMKEN bearings are first choice with truck manufacturers)

TO make sure extreme cold is no problem for Timken® tapered roller bearings, we designed our own North Pole "testing grounds". It's unique in the bearing industry. You can see it here-the Cold Room in our new Customer Research Center. In this super freezer we reproduce bearing and lubricant operating conditions at temperatures as low as -60°F., to make sure Timken bearings roll the load in any kind of weather. It's another step we take to be certain Timken bearings run better, last longer.

Timken bearings are geometrically designed to roll

true. And they're precision-made to live up to their design, from melt of steel to final bearing inspection. We even make our own fine alloy steel to assure quality. America's only bearing manufacturer that does. You can see why Timken bearings are first choice with truck manufacturers.

When you need a tapered roller bearing replacement, specify Timken bearings. And for helpful service information, send for our free booklet, "The Care and Maintenance of Timken Tapered Roller Bearings in Automotive Equipment." Write Dept. JCC-1, The Timken Roller Bearing Company, Canton 6, Ohio. Canadian plant: St. Thomas, Ontario. Cable address:



SINCE THEY'RE BEST WHEN THE TRUCK IS NEW, THEY'RE BEST FOR REPLACEMENT, TOO!



TIMKEN TAPERED ROLLER BEARINGS ROLL THE LOAD







plus extra savings in operators time are the results obtained by hundreds of YMR-76 Service Bodies in operation today. That's because YMR-76 units are compact and rugged... provide ample and convenient carrying space for materials and tools... with capacity for adjustment to meet changing conditions. The YMR-76 is also an efficient cable-splicing unit. Write for complete details, price and delivery information today!

"Custom" features such as material drawers with adjustable compartments are available as standard or optional equipment, as required.

YORK-HOOVER CORPORATION
YORK, PENNSYLVANIA

CLIP AND MAIL TODAY!

Dept. 1C, York-Hoover Corporation
York, Penna.

Please send me a copy of Bulletin No. 942
covering your YMR-76 Service Body.

Name

Company

Address______
City and State_____

CREATIVE ENGINEERING FOR THE PUBLIC UTILITY INDUSTRY SINCE 1892



USS COR-TEN Steel tanker earns an extra \$1066 in seven weeks

at A. F. Comer Transport Service, Rocky Mount, North Carolina

"This new Cor-Ten Steel tanker carries 6500 gallons—1500 gallons more than our old tankers," says Mr. A. F. Comer. "And the load doesn't exceed highway weight limits because the tanker itself is so light. The extra payload gives us 30% more revenue on each trip. In one seven-week period it amounted to a bonus of \$1066."

Gary Steel Products Corporation, Lynchburg, Virginia, built the three-compartment tanker with USS Cor-Ten Steel to reduce the weight without sacrificing strength. Cor-Ten Steel is stronger than A-7 type structural steel. It has a 50% higher yield point, so thinner steel sections can be used—reducing the weight of a tank body as much as one-third. Cor-Ten Steel reduces maintenance, too, because it has high resistance to fatigue and impact, and 4 to 6 times more resistance to atmospheric corrosion.

Ask your equipment supplier about construction with all three brands of USS High Strength Steel—Cor-Ten, Tri-Ten, and Man-Ten. USS "T-1" Constructional Alloy Steel and USS Stainless Steels are also used in some trucks and trailers. Each of these steels has special characteristics that make it ideal for specific applications. See how this "family of steels that do more" can improve your fleet.

USS, Cor-Ten, Man-Ten, Tri-Ten and "T-1" are registered trademarks of United States Steel



United States Steel Corporation—Pittaburgh American Steel & Wire—Cleveland Columbia-Geneva Steel—San Franciscs Tennessee Coni & Iron—Fairfield, Alabama United States Steel Supply—Steel Service Centers United States Steel Expert Company

United States Steel

Con



THEY STOP THE 230,000 POUND B-47 SAFELY...



THEY'LL STOP YOUR RIGS! MOTOR WHEEL'S

EXCLUSIVE PATRIFUSE BRAKE DRUMS



Centrifuse drums are in the heart of these huge B-47 dual wheel assemblies.

Imagine a 600 mile-per-hour rig with a gross weight of 115 tons highballing down the highway . . . that's the braking job that Motor Wheel's exclusive Centrifuse drums handle day after day, time after time when B-47 Stratojets land.

Why Centrifuse brake drums? Because they are safer, stronger and lighter with molten iron fused to a tough outer steel stamping by centrifugal force. This unique manufacturing process gives toughness and strength which cannot be matched in full cast iron drums.

Centrifuse brake drums are better in every way — they're also cooler, better balanced, more dependable . . . over 100 million have been in service without a single break or explosion. Specify Centrifuse brake drums for your rolling equipment.

Write for the FREE Brochure on Contrifuse Brake Drums



MOTOR WHEEL Corporation

SERVING THE AUTOMOTIVE INDUSTRY SINCE 1903







BRAKE DRUMS 83

ATA's New Home To-be

At its annual convention held last year in Miami Beach, the American Trucking Associations' Executive Committee okayed a new 1½ million dollar office to be built this year. The architects sketch of the new home office is shown here. The seven-story, limestone faced structure will be located on P Street between 16th and 17th Streets, N.W. which is directly behind the associations' present headquarters in Washington, D. C. The new office will house 300 ATA and ATA Conference employees as well as meeting rooms for the Executive Committee. Completion date is set for the Spring of 1960.



By Equipping Your Fleet with HANDY GOVERNORS

WORLD'S LARGEST MANUFACTURER OF AUTOMOTIVE GOVERNORS

CORPORATION

ANN ARBOR, MICHIGAN

Jan. News Roundup

Continued from Page 134

cranking system "Hydrotor." First half dozen units in a mobile fleet are ready to go. Each of the pick-up trucks has a "Hydrotor" equipped diesel engine mounted in its body.

Wisconsin Engine Clinics

MILWAUKEE, WIS. — Wisconsin Engine Corp. announces the following engine service clinic schedule. For details, contact your local Wisconsin distributor. The schedule as announced so far includes Hibbing, Minn.—Jan. 13, Minneapolis, Minn.—Jan. 14-15, Albert Lea, Minn.—Jan. 16, North Platte, Neb.—Jan. 27, Norfolk, Neb.—Jan. 29, Lincoln, Neb.—Jan. 30 and Pendleton, Ore.—Jan. 30.

New Book Helps Moving

NEW YORK CITY—Garner Dodson, a lady geologist, has moved her household 40 times in 17 years. One result is a new book being published by G. P. Putnam's Sons (210 Madison Ave., New York 16, N. Y.), called "Making the Most of Every Move." Topics covered include packing, reducing moving expenses, selecting a new home, selling the old one, adjusting to a new community, etc. Putnam is offering discounts on quantity purchases.

Truck Stop Gets Recognition

TOWANDA, ILL.—The adage that a good place to eat is where the trucks stop got reinforcement last month. Foster's Pure Cafe and Station Stop located here on Route 66, was featured editorially in a recent issue of American Restaurant magazine because of its "outstanding service to the dining public, the community it

(TURN TO PAGE 144, PLEASE)



OFFSET HANDLE

134

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1959



EXTENSION LOCK

6 OF A KIND....THE BEST!



LEAF HINGE

COMMERCIAL BODY

HARDWARE

When it comes to fine body building, you need hardware that's both modern and dependable. Like Hansen Commercial Body Hardware. Here you'll find a wide range of styles and sizes, with every product high in quality, outstanding in design, easy to install. Insist on Hansen, the leader for 40 years... then you'll have the best!

WINDOW



DOOR HANDLE







HANSIN...The Hardware for Hard Wear Representatives in All Principal Cities

HEAVY-DUTY LOCK

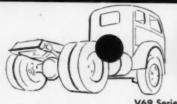
A. L. HANSEN MFG. CO.

5037 Ravenswood Avenue . Chicago 40, Illinois



COMMERCIAL CAR JOURNAL, January, 1959

141



2-way



FOR SADDLE TANK OPERATION

On trucks equipped with saddle tanks, the Skinner V69 Solenoid Valve can make fuel level readings and tank switching a one-step, push-button operation.



FOR DIESEL CUT-OFF

On diesel trucks, the Skinner V75 Solenoid Valve can be used to automatically shut the engine down by cutting off the fuel to the injectors.





FOR PROPANE AND BUTANE CUT-OFF

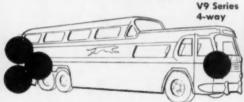
On high pressure propane and butane trucks, the Skinner V61 Solenoid Valve can be used to automatically shut off the tanks from the fuel system when the vehicle is not in operation.





FOR AIR AND HYDRAULIC CONTROL

Skinner V5 Solenoid Valves are employed to control the operation of cylinders, diesel racks, clutches, brakes, governors, transmissions; also heating, refrigerating, fuel and air suspension





FOR SWITCH CONTROL

Skinner V9 Solenoid Valves can be used with confidence in conjunction with centrifugal, thermal, ignition and limit switches to automatically perform such sequencing, interlocking and safety functions as door opening and closing, ventilation, air conditioning, etc.

Skinner Solenoid Valves can help you solve many different control problems

No matter what your control problem is, chances are a Skinner Solenoid Valve can solve it. "On-the-road" tests show these valves can take it under all conditions.

In addition to quality and simplicity of design, Skinner Solenoid Valves have features that assure long, uninterrupted operation of any system which uses them.

If your problem is fuel control, air conditioning, ventilation, door opening or closing, suspension, fuel injection, etc., consider the use of Skinner Solenoid Valves — there are over 100,000 variations available, which means custom design from standard parts. Let our application engineering department show you how they can meet your specific requirements.

For complete information, write us at Dept. 541 or contact a Skinner Representative (they are listed in the Yellow Pages).

Skinner Solenoid Valves are distributed nationally



SKINNER ELECTRIC VALVE DIVISION NEW BRITAIN CONNECTICUT

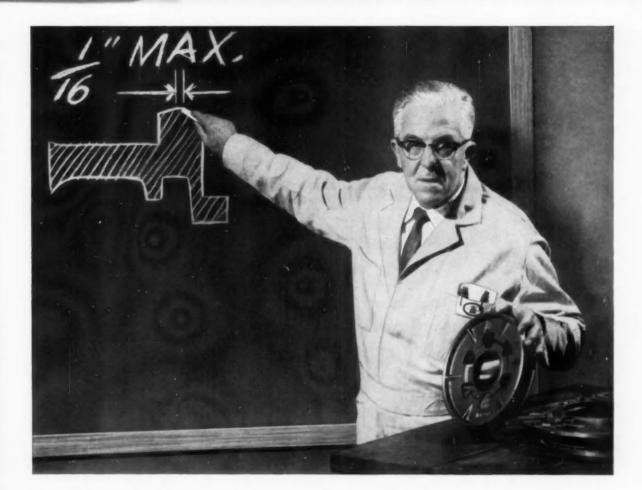
Here's the a fulcru

The reache edge l depth suffici lever :

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This field-rebuilt clutch "died" too soon -

Here's why: A field rebuilder re-used the adjusting plate with worn-down fulcrum edges.

The limit of wear permissible is reached when the *width* of the fulcrum edge hits 1/16". Beyond this point, the depth of metal beneath the edge is insufficient to retain the proper clutch lever ratio.

The result is lowered torque capacity, chatter, slipping, overheating of the reassembled clutch . . . and—in this case— a loss of 30,000 miles in clutch life!

For Lipe Dependability . . . Go to Lipe!

For a clutch built to Lipe specifications and under Lipe quality controls . . . a clutch produced by factory-trained workmen on factory production machinery . . . balanced with costly electronic devices . . . and inspected with Lipe close-tolerance testing facilities . . . go to Lipe.

All Parts in Lipe Clutches Conform to High Precision Standards

From our experience in supplying clutches to 54 makers of heavy duty equipment comes the know-how that goes into the manufacture of the Lipe Guaranteed Clutch. That is why we can unconditionally guarantee our product to be unequalled by field rebuilders.



Look for this Factory Seal when you take delivery on a Lipe Guaranteed Clutch for replacement service. It is your assurance of long, trouble-free life and big long-run savings!

SEND FOR OUR FREE "Clutch Facts" Booklet

Tells you how to get more life from your heavy-duty clutches and what to look for when replacing them.







Jan. News Roundup

Continued from Page 140

serves, and the food industry as a whole." In addition to tourist traffic. Foster serves some 250 to 300 truck drivers daily-mostly between 10 PM and 4 AM. Facility handles Pure Oil products, has two acres of truck parking space and a drivers' dormi-

Baby Chicks Go by Truck

WASHINGTON, D. C. - Commercial hatcheries delivered most of their baby chicks to poultry raisers by truck in 1957, says a recent report from Dept. of Agriculture. It describes the equipment being used, makes suggestions for better and more economical transportation of the chicks. For a copy, write Office of Information, U. S. Dept. of Agriculture, Washington 25, D. C. Ask for Marketing Research Report No. 267, Baby Chick Transportation Problems and Equipment.

NCMCA Has New President

PINEHURST, N. C .- North Caroline's fleet operators meeting here elected Paul H. Johansen as president of North Carolina Motor Carriers Assn. last month. He is president of Central Motor Lines, Charlotte. Aiding him will be Ed W. MacLeod, Jr., of Ermac Trucking as first vice president, Paul P. Davis of McLean Trucking as second vice president.

Road Group Wins World Prize

GENOA, ITALY - International Road Federation with headquarters in Washington, D. C., has been awarded the 1958 Christopher Columbus International Prize for Communications. It is awarded annually by the City of Genoa for outstanding achievement in transportation and communication. The award includes a cash prize of

Europe Has Traffic, Too

BRUSSELS, BELGIUM-Traffic congestion, it turns out, is not confined to the United States. In a comprehensive 46-page booklet, the Internasays "It's high time to put an end to traffic congestion." Problems de-



Here's a partial view of Ford's experimental gas turbine engine which has been undergoing tests for the past 18 months. The large "can" with bellows (left) is the combustion chamber. Hot gases travel down to two turbines, one driving the compressor and the other to the truck's driveshaft. Gases then return up the large duct (center) to the heat exchanger

tional Union of Public Transport (TURN TO PAGE 148, PLEASE)

Gas Turbine Engine



just ahead of the exhaust pipe.

at last!

a low cost, small size large area filter

Solve your installation problem with just one ROOSA MASTER fuel filter assembly with paper element filter. Only 6" high, 31/2" in diameter, it takes less space on your engine. No tools required. no fuel lines to disconnect and only 1" clearance needed when changing element . and it costs less than throw-away filter assemblies. Write for information.



makes good diesels better

HARTFORD MACHINE SCREW CO., HARTFORD 2, CONN. DIVISION OF STANDARD SCREW COMPANY





THE DIESEL THAT DEPENDS ON ROOSA MASTER

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filtering o

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have speed opera Fm si



"Well, I sent him away happy!"

"I gave him the best heavy-duty, long-mileage engine bearings on the market—Federal-Mogul sintered copper-alloy bearings. They've proved they have what it takes to stand up under the load, speed and temperature conditions of heavy-duty operation."

Fm sintered bearings have a low-carbon steel back

for strength and bonding quality, pure copper-lead lining of sintered metal powder, a brass barrier for lining stability, lead-tin overplate for break-in protection and pure flash tin plating for overall corrosion resistance.

Call your Federal-Mogul jobber for prompt service on ALL bearing requirements!



FEDERAL-MOGUL SERVICE





ARMSTRONG TREAD INVENTION LICKS NYLON TIRE CRACKING

Million-mile road test proves new tread ends cracking problem . . . and gives amazingly better traction, up to 19% more mileage!

Nylon shrinks when heated. Tread designs originated for other cords lead to cracking when used for nylon. But now, Armstrong offers you the first truck tire conceived and developed to use all of nylon's tremendous toughness—really makes nylon "pay off"!

Fleet road tests show: (1) No cracking whatever; (2) Traction up 30% over average truck tire; (3) Mileage increased up to 19%; (4) Excellent stability – front or rear; (5) Best-ever resistance to bruising and road damage. Get the facts on the "Miracle Miler" today!

ARMSTRONG
MIRACLE MILER
"Designed for Nylon"

Another "first" from

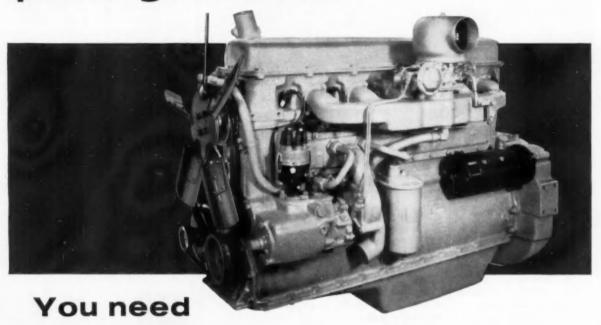
ARMSTRONG RUBBER COMPANY West Haven, Connecticut

COMMERCIAL CAR JOURNAL, January, 1959

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If you want more ton-miles per engine dollar



HALL-SCOTT

When you buy an engine, you're buying horsepower, not iron. And dollar for dollar, Hall-Scott truck engines deliver *more* horsepower, *longer*, than any other truck engine!

Hall-Scott engines are in a class by themselves. They give the highest horsepower per pound of any truck engine—yet deliver this power with a conservative compression ratio and a sensible speed rating, important to long engine life. And Hall-Scott performance must be seen to be believed! Hall-Scott powered trucks will walk away from any other rig, on the open road or in traffic. Users have told us that Hall-Scott engines cut their

run time on some routes by 30%! Add the simplified maintenance made possible by the Hall-Scott overhead camshaft and the fact that many Hall-Scott's have compiled million-mile records and you get one answer—real engine economy.

Before you specify the power for your next truck, investigate the long-term economies Hall-Scott gasoline and LPG engines offer in the range from 240 to 368 h.p. These fine engines are now in quantity production at Hercules Motors Corporation's Canton plant, and service parts are available through all Hercules distributors. Write today for literature.

HERCULES ENGINES
... Sold and Serviced the World Over



HERCULES MOTORS CORPORATION
Canton, Ohio

nt

FOR LOWER TON-MILE COSTS



with DEPENDABLE
CONTINENTAL RED PO

In highway hauling, as elsewhere, profit margins continue to shrink, and wise choice of rolling stock becomes more essential than ever. That is why more and more truckers are replacing original equipment engines with rugged Continentals, engineered expressly for the job. Choose from the models listed below. See your distributor today.

RED SEAL TRANSPORTATION ENGINES

GASO	LINE			Model
Medel	Cyl.	Displ.	Bare Engine H.P.	K6330
N4062	4	62	26.3 @ 3500 RPM	K6363 T6371
Y4069	4	69	28.0 @ 3400 RPM	T6427
Y4091	4	91	36.0 @ 3400 RPM	
F4124	4	124	47.0 @ 3200 RPM	U6501
F4140	4	140	52.0 @ 3200 RPM	R6513
F4162	4	162	58.0 @ 3200 RPM	R6572
F6186	6	186	77.0 @ 3500 RPM	R6602
F6209	6	209	90.0 @ 3500 RPM	S6749
F6226	6	226	98.8 @ 3500 RPM	S6820
F6244	6	244	103.3 @ 3500 RPM	V8603
M6271	6	271	96.5 @ 3000 RPM	CUSHIC
M6290	6	290	108.0 @ 3000 RPM	COSING
M6330	6	330	125.0 @ 3000 RPM	Model
M6363	6	363	146.0 @ 3000 RPM	TD6427
86371	6	371	123.5 @ 3000 RPM	RD6572
B6427	6	427	142.0 @ 3000 RPM	VD8603
F06226	6	226	126.2 @ 3400 RPM	SD6802
K6271	6	271	114.5 @ 3200 RPM	-50000
WCCCC.		200	114.5 @ 3200 RFM	

Cyl.	Displ.	Bare Engine H.P.
6	330	147.0 @ 3200 RPM
6	363	162.0 @ 3200 RPM
6	371	143.8 @ 3000 RPM
6	427	170.0 @ 3000 RPM
6	501	186.0 @ 2600 RPM
6	513	192.2 @ 2800 RPM
6	572	220.0 @ 2800 RPM
6	602	232.0 @ 2800 RPM
6	749	250.0 @ 2800 RPM
6	820	300.0 @ 2800 RPM
8	603	260.0 @ 3200 RPM
	6 6 6 6 6 6 6	6 330 6 363 6 371 6 427 6 501 6 513 6 572 6 602 6 749 6 820

CUSHIONED POWER DIESEL

Model	Cyl.	Displ.	Bare Engine H.P.
TD6427	6	427	146.5 @ 2600 RPM
RD6572	6	572	172.0 @ 2400 RPM
VD8603	8	603	200.0 @ 2800 RPM
SD6802	6	802	225.0 @ 2200 RPM

PARTS AND SERVICE EVERYWHERE

123.0 @ 3200 RPM



Continental Motors Corporation

6 EAST 45TH ST., NEW YORK 17, NEW YORK • 3817 S. SANTA FE AVE., LOS ANGELES SR, CALIF. 8218 CEDAR SPRINGS ROAD, DALLAS 9, TEXAS • 1252 OAKLEIGH DR., EAST POINT (ATLANTA) GA.

Jan. News Roundup

Continued from Page 144

scribed are illustrated with examples from Copenhagen, Denmark; Paris, France; London, England; Munich, Germany; Basle, Switzerland; Stockholm, Sweden; Brussels, Belgium; Genoa, Italy. But regardless of where, the facts sound much like our traffic problems and indicate a need for more adequate urban streets and rural highways.

MTA Elects New President

GRAND BAPIDS, MICH.—Robert Cooper, Red Star Transit president, is newly elected president of Michigan Trucking Assn. He'll be assisted by Herbert Schindler, Jr., of White Star Trucking as first vice president, Ernest T. Warskow of Lake Shore Motor Transit as second vice president, Philip W. Lewis of Grand Rapids Motor Express as treasurer, and Charles Cooper of Holland Motor Express as secretary.



New York—The New York Port Authority has advised us that the 20 mph minimum speed limit in the Holland and Lincoln Tunnels is being strictly enforced to help speed up traffic.

Alabama—The state Supreme Court in the case of Alabama v. Hotz GMC Trucks, Inc., has ruled that Hotz is not subject to the Alabama mileage tax of 1939 because he is not a motor (TURN TO PAGE 154, PLEASE)



"De you deliver bables?"

148

COMMERCIAL CAR JOURNAL, January, 1959

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SPOTLIGHT LOW BEAM



6013

NEW FOR RUGGED FLEET SERVICE

Redesigned lens • Improved high beam Glare-reducing filament shield Shock resistant, spot-welded filament support E-Z aim platforms • Ruggedized filament mount

BETTER VISIBILITY....SAFER PASSING FOR ALL TWO-HEADLAMP FLEET VEHICLES

OLD BEAM

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1959



NEW BEAM



Here's how the new spotlight low beam helps you see better and pass more safely

OLD Range of low beam in old-type 7-inch headlamps is no longer adequate for modern highway conditions. As vehicles approach, the opposing headlights create a glare that tends to cancel out the visibility of both drivers—and cause a critical "blindspot" in passing. **NEW** 6000 series spotlight low beam concentrates more light farther along the right side of road, away from oncoming lights . . . provides better visibility thru critical passing zone. Even against 4-headlamp vehicles and undimmed lamps, more light gets through. You pass with less eye strain, less hazard.

Equip your fleet with greater night driving safety with

FOR PASSENGER CAR FLEETS:

Specify 6006 (6-volt) or 6012 (12-volt) Vision-Aid Headlamps with Spotlight Low Beam.



TUNG-SOL

NEW TUNG-SOL VISION-AID HEADLAMPS with SPOTLIGHT LOW BEAM Lamp Division, TUNG-SOL ELECTRIC INC., Newark 4, N. J.

POWER STEERING That Can Take It

For TRUCKS That Can Take It











WALTER



Corros Hands

High a Rugge Machi

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Rugge

COMME

VICKERS HYDRAULIC POWER STEERING

The hydraulic power steering systems used on trucks like these have to be able to take it because the vehicles are required to take it. They are built for the rough, tough jobs . . . and the hydraulics must match. Heaviest axle loads . . . off road operation . . . the most difficult steering conditions possible are easily mastered by the power, inherent high quality, dependability and tough durability of Vickers Hydraulic Power Steering Systems.

Steering is made "fingertouch" easy and safe. Road reaction can't reach the driver through the steering wheel. Obstructions can't cause swerving. Driving is not a wrestling match, so the driver gets more work done with less fatigue.

VICKERS INCORPORATED

DIVISION OF SPERRY RAND CORPORATION **Mobile Hydraulics Division** ADMINISTRATIVE and ENGINEERING CENTER
Department 1418 • Detroit 32, Michigan

The superior design and rugged construction of the Vickers Hydraulic Power Steering Booster assure dependability, long life and low maintenance. Typical are the oversize piston rod and the extra large control valve.

The Vickers Vane Type Pump has hydraulic balance that eliminates pressure-induced bearing loads and assures long life with minimum maintenance . . . the key to less downtime. Correct running clearances (both radial and axial) are automatically maintained, providing high efficiency throughout pump life.

Get all the facts about the advantages of Vickers Hydraulic Power Steering. Ask for Bulletin M5101A.

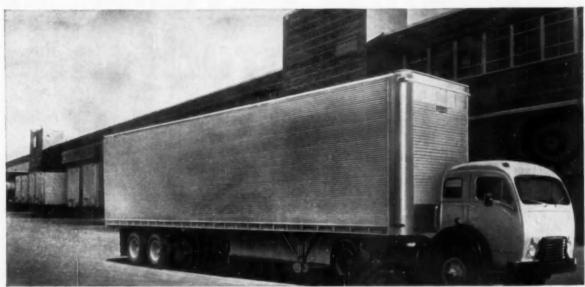
Application Engineering Offices: * ATLANTA * CHICAGO * CINCINNATI * CLEVELAND * DETROIT * GRAND RAPIDS * HOUSTON * LOS ANGELES AREA (El Segundo) * MINNEAPOLIS * NEW YORK AREA (Summit, N.J.) * PITTSBURGH AREA (Mt. Lebenco) * PORTLAND, ORE. * ROCHESTER * SAN FRANCISCO AREA (Berkeley) * SEATTLE STACTORIES giso in AUSTRALIA EMGLAMP.

FACTORIES also in AUSTRALIA, ENGLAND, JAPAN and GERMANY IN CANADA: Vickors-Sperry of Canada, Ltd., Toronto, Montreal and Vancauve

ENGINEERS AND BUILDERS OF OIL HYDRAULIC EQUIPMENT SINCE 1921

NEW FRUEHAUF STAINLESS

has lifetime toughness built in!



The new 40' straight-frame Lifetime Stainless Volume \Van.

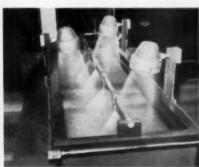
Corrosion-proof materials.
Handsome, gleaming appearance.
High advertising value.
Ruggedly built sides.
Machine-welded corrugations.
Rugged, hat-shaped side posts.
Torture-tested, water-proof roof.
Rugged, hat-shaped roof bows.

Weathertight body.
Weathertight "plymetal" doors.
High-volume design.
Extremely light weight.
Nearly square inside corners.
Extra wide rear opening.
Low-silhouette coupler optional.
Lubrication-free tandem.

Protected I.C.C. lighting.
Interchangeable Fruehauf parts.
Low upkeep factor.
Easy-to-repair design.
Unlimited life expectancy.
Permanent earning power.
High resale value.
Convenient leases available.



Rugged, hat-shaped side posts.



Torture-tested, water-proof roof.



Weathertight "plymetal" doors.



For Forty-Four Years — More Fruehauf Trailers On The Road Than Any Other Make!

World's Largest Builder of Truck-Trailers

FRUEHAUF TRAILER COMPANY

10940 Harper Avenue • Detroit 32, Michigan

BC SEND FREE ILLUSTRATED DETAILS AT ONCE ON THE NEW "LIFET

SEND FREE ILLUSTRATED DETAILS AT ONCE ON THE NEW "LIFETIME STAINLESS"

NAME

COMPANY

ADDRESS

STATE

COMMERCIAL CAR JOURNAL, January, 1959

The latest advance in nylon cord truck tires



•"No evidence of channel cracking or ply separations during original-tread mileage on our post-inflated nylon cord tires." That's the report from Super Service Motor Freight, Nashville, Tennessee. The Super Service fleet was selected to road-test post-inflated nylons because of the grueling punishment it gives tires.

New post-inflation curing process takes advantage of nylon's superior strength and toughness . . . brings you better tires than ever before.

Tire makers have found a way to make the most of nylon's remarkable strength. A new process, called post-inflation, solves many tire problems that have long plagued truckers. New post-inflated nylon cord truck tires give truckers greater assurance of getting all the mileage the strength of nylon builds into truck tires.

In simple terms, the post-inflation process removes tire growth during the curing process. The process reduces "in-service growth" by over $50\%\ldots$ practically eliminates channel cracking and ply separations . . . drastically reduces the damage from cuts. The net results are dollar savings for truckers . . . no more premature retreading.

Most leading tire manufacturers are postinflating their newest lines of nylon cord truck tires to bring you even better performance . . . even lower cost per mile.

BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY



Enjoy the "Du Pont Show of the Month" on CBS-TV

THE SAFEST, STRONGEST TIRES ARE MADE WITH

NYLON



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1959



(Heavy Duty Trucks)

PEH DIESELS

the modern prime mover that gives your trucks these exclusive money-making features:

- Compact, modern aluminum design
 More power with less weight and space for greater payloads
 "Unitized" power assemblies replaceable without removing engine from its mountings
 25% fewer parts—all wearing parts completely interchangeable

plus these performance advantages:

- . High torque

Specify the 2-cycle PaH DIESEL for that new product on your drawing boards.

HARNISCHFEGER

Diesel Engine Division • Crystal Lake, Illinois

The PaH LINE: INDUSTRIAL AUTOMOTIVE MARINE 8, 3, 4 and 6 Cyl. Models-40 to 280 HP

GENERATOR SETS 20 to 125 KW, AC or DC

Indiana's "All-Star Safety Team of 1958"

Between halves at the Indiana and Minnesota football game, these Indiana truck drivers with accident-free records ranging from 21 to 30 years were awarded plaques for traffic safety records. Sponsor of the program was Jerry Tobin (holding plaque) formerly with White Motor Co. The presentations were made by Lieutenant Governor Crawford Parker (far right in photo). The drivers have the longest known safety records in the state according to the Indiana Motor Truck Assn. Combined safety record represents 263½ years, and 18,616,514 miles of safe driving.



on every **OVERHAUL** be sure you for Top Performance Your tune-up is not complete unless you P&D-ize the whole ignition system. Then you can be sure of customer satisfaction - for P&D parts are warranted a full year. Get into the P&D-ize groove - learn the P&D story for Performance, Dependability and Profit! P&D MANUFACTURING CO., INC. STARTING - LIGHTING - IGNITION 19-02 STEINWAY ST., LONG ISLAND CITY 5, N. Y. Export Sales: Borg Warner International, 36 So. Wabash Ave., Chicago J. III.

Jan. News Roundup

Continued from Page 148

carrier. Applying the primary business test, the court ruled that Hotz' primary business was selling and servicing GMC trucks and that truck and trailer leasing was a side line.



Deioma Trucking Co., Alliance, Ohio, recently gave a dinner and dance for its drivers and families. Drivers recently completed 2,639,000 miles and 134 safe-driving years. Company average was 146,000 miles between each chargeable accident. High man had 12-year accident-free record.

Central Truck Lines, Tampa, Fla. to 45 drivers with no-accident records ranging up to 16 years.



Point Express, Charleston, W. Va., and Ellis Trucking Co., Indianapolis, Ind., each have bought 50 Model No. D860 GMC tractors. Specifications include lightweight aluminum construction, GM 6-71 SE diesel engine and BBC dimension of 90 in.

The Transport Company of Texas, with headquarters in Corpus Christi, has added 4 Diamond T diesel sixwheelers to its fleet. They are the

(TURN TO PAGE 162, PLEASE)



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For 19 years, in world's heaviest traffic, Perkins' truck engines

GULF MAKES THINGS

"Since this is our 50th anniversary in the business, I think it's a good time to review our fleet performance over the years," says Robert W. Perkins, President of Perkins Trucking Company, Inc., Maspeth, New York.

Mr. Perkins' report, which follows, offers plenty of proof that Gulf makes things run better. For the last 19 years all his trucks have been powered by Good Gulf Gasoline and lubricated with Gulf motor oils and greases.

"For one thing, our operation is unusual for a fleet of more than 200 big units," says Mr. Perkins. "We are basically a stop-and-go delivery organization—operating to, from and through New York City where the traffic is heavier than in any other place in the world.

"We average 560,000 deliveries a year, totalling 150,000 tons. With the high number of stops per mile of travel, engine maintenance is particularly important to us—and it hinges on good fuels and lubricants.

"We need a gasoline that burns clean. We need an oil with a good lubricating base and the proper detergent additives to prevent build-up of sludge. That's the kind of gas and oil we've been getting from Gulf for over 19 years—plus excellent technical service that has helped

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"Be stop-a pulled of wea

double better clean-Gulf of Your

Сомме

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COMMERCIAL CAR JOURNAL, January, 1959





Proof in the pistons. John Schleier, mechanical foreman, examines a piston from one of the engines of Perkins Trucking Company. Rings are free, and there is very little evidence of wear after 100,000 stop-and-go miles—using Good Gulf Gasoline and Gulflube HD motor oil.



Mr. Thomas Perkins (left) and Mr. Richard Perkins (center) in charge of operations, safety and maintenance for Perkins Trucking Company, discuss fleet operations with Mr. M. A. Rafferty, Gulf Sales Engineer.

Off and running—on Good Gulf Gasoline. Shown here, at their transfer terminal in Hicksville, Long Island, are some of the more than 200 units in the fleet of Perkins Trucking Company of Maspeth, New York. The firm uses over 30,000 gallons of Good Gulf Gasoline per month.

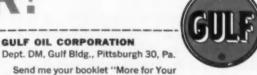
run clean on Good Gulf Gasoline...

RUN BETTER!

us keep our maintenance costs down.

"Before overhauls are required, we get about 100,000 stop-and-go miles from our engines. When heads are pulled the engines are clean. There is very little evidence of wear. There is no sludge in the crankcases."

How about your fleet performance? Maybe you should double-check — and see how Gulf makes things run better with clean-burning Good Gulf Gasoline and clean-working Gulf motor oils. Just call your nearest Gulf office. Meanwhile write for our booklet "More for Your Money with Good Gulf Gasoline."



Name			
Title			
Company			
Street			
City	Zone	State	

Money with Good Gulf Gasoline"

Hubert I. Kennedy of National Transit Corp., Ohio, scored again, successfully defending the title he won last year in the three-axle tractor semi-trailer class. Mr. Kennedy drove a model A-180 International tractor.



Meet the national champions in four of the five championship classes at the American Trucking Associations' National Truck Roadeo. International Harvester is particularly proud to salute them because they all won with INTERNATIONAL Trucks!

Over 50 of the best drivers in America were entered in the National Truck Roadeo at Miami in November. These were the men named champions in state and regional competitions.

They gave a superb demonstration of scientific driving skill, cool judgment and all-around professional ability. Every member of the trucking industry can be proud of every driver — and especially of the winners.

History was made when the champions were announced.

INTERNATIONAL

COMMERCIAL CAR JOURNAL, January, 1959

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In the four-axle tractor semi-trailer class, Robert E. Rudesill of Glendenning Motorways, Inc., Minnesota, emerged victor in a contest that was close all the way. Mr. Rudesill piloted an International model V-205 tractor.



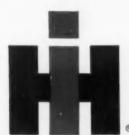
Winner in the five-axle tractor semi-trailer class was FLOYD F. BROWN of Motor Cargo, Inc., Wisconsin. Mr. Brown won his championship at the wheel of an International model ACOF-195 Sightliner tractor.



HISTORY AT MIAMI!

Four out of five winners drove to victory with the same make of truck. It was the first "straight truck to five-axle" sweep for any single truck manufacturer.

Why did all these champions choose International Trucks when the chips were down? For the same reasons professional drivers and fleet operators choose International Trucks every day . . . they're designed and engineered for safety, comfort, handling ease, and all-around top performance.



International Harvester Company, Chicage
Motor Trucks * Crawler Tractors
Construction Equipment * McCormick®

TRUCKS.... Choice of Champions

COMMERCIAL CAR JOURNAL, January, 1959

morco

Factory-Certified
Exchange Crankshafts give
Trouble-Free Operation
for the Full Life Cycle
of Your Diesel Engine



Morco dealers — coast to coast — are stocked with reconditioned, like-new crankshafts for different diesel engine models. Users of Detroit Diesel and Cummins engines can exchange worn shafts for MORCO factory-reconditioned shafts through authorized dealers.

Why take chances? Let your dealer be your source for dependable, safe crankshaft regrinding. You get immediate service, guaranteed quality and terrific economy. Ask your dealer about MORCO today.

Look what Morco's samplete reconditioning service offers you!

Magnetius—six separate magnetius inspections with latest equipment.

Ground on production type equipment to engine reanufacturer's specifications. Original strake retained

TOCCO® Induction Hurdened by the original equipment method when necessary.

Relief Fillets increase strength at the most critical areas.

balancing equipment.

Thrust Collars and surfaces repaired.

Sour Fits renewed.

lay Ways restored.

Dowel Heles repaired.

Oli Sed surfaces renewed.

Throads repaired.

*TOCCO is a registered trademark of The Ohio Crankshaft Co.

MOINC. CO

a subsidiary of The Ohio Crankshaft Company

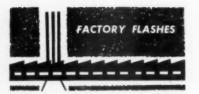
Bedford, Ohlo

City.

New Free Bulletin

> MAIL COUPON TODAY!

Morco, Inc. — Dept. 5 22201 Aurora Road, Bedford, Ohio	
Please send free copy of "The MORCO Story	/**:
Name	
Company	



Rochester Products Div., General Motors Corp., has added seven men to its field service engineer force. Purpose is to give increased technical carburetor service throughout the country.

Bendix Products Division, South Bend, Ind., has appointed Cleveland Ignition Co., Cleveland, Ohio, as central warehouse distributor for its automotive products.

Wendall C. Cheney has been elected president of Gillett & Eaton, Inc., Lake City, Minn. The company is a well-known piston manufacturer.

Thompson Ramo Wooldridge, Inc., is the new name of The Ramo-Wooldridge Corp. It had been an affiliate of Thompson Products, Inc.

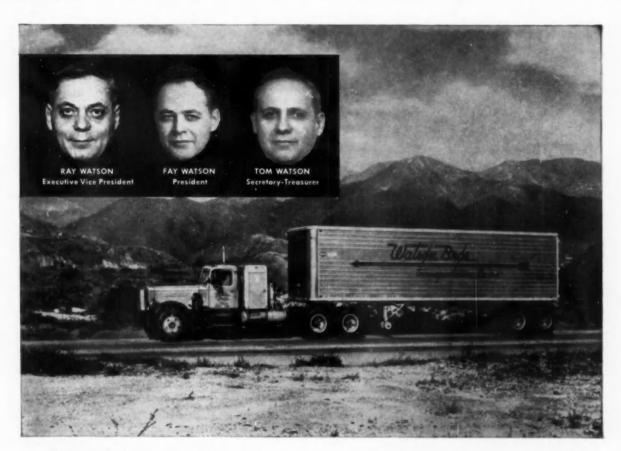
Mack Trucks is unveiling three new truck models, a new transit bus, an off-highway dump truck, and a fire truck with an automatic transmission at the 1959 Chicago Automobile Show.

Body Hardware Demonstrator



Built to resemble a scaled-down semi-trailer, this mobile demonstrator is being used by the Forge and Fittings Div., H. K. Porter Company to show its Cleveland Forged Hardware to fleet operators, body builders and distributors. The demonstration unit has many operational displays, offers answers to many body hardware problems. The mobile unit is covering local truck body and equipment functions throughout the country.

COMMERCIAL CAR JOURNAL, January, 1959



WATSON BROS.

rely on the rugged performance of CLEVITE 77!

You know Watson Brothers Transportation Company, Incorporated as one of the ten largest fleets in the country. In 1940, Watson units traveled only 8,000,000 miles. Today, more than 2,700 units pile up over 160,000,000 miles a year—that's seven times around the world every day.

An important contributor to Watson's success has been the astute purchasing and maintenance procedures adhered to over the years—procedures assuring maximum on-the-job performance. Clevite 77 bearings have been a long time partner in this efficient and profitable system. Why?

Because no other bearing can offer the fatigue life you get in Clevite 77's patented trimetal construction. Copper-lead alloy, cast onto a steel back, can carry greater loads than any other bearing material. And a .001" electroplated babbitt overlay provides an ideal running surface. Only Clevite 77 offers these combined benefits.

Use Clevite 77 bearings in your next overhaul—you'll want to make them a partner in your own maintenance program. Immediate service on Clevite 77 bearings for your equipment is available from your N.A.P.A. jobber.



ENGINE BEARINGS

CLEVITE SERVICE: Cleveland Graphite Bronze . Division of Cleville Corporation . Cleveland 3, Ohio



Jan. News Roundup

Continued from Page 154

Model No. 923 equipped with Bostrom seats, Cummins NH-180 engine, RoadRanger transmission and Kysor radiator shutters. The six-wheelers pull 6000 gal tank trailers all through the Southwest.

Davidson Transfer and Storage Co., Baltimore, Md., have added 10 White tractors to its fleet. All are powered by the Cummins JT-6-B.

Surface Transit, Inc., New York City, has added 10 new air suspension buses to its fleet. The new buses are Mack Model No. C-49, with 50-passenger capacity.

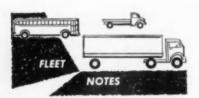
McLean Trucking Co., Winston-Salem, N. C., has purchased 110 GMC diesel COE tractors. The new units are Model No. DF862 with the GM 6-71 SE engine. GCW rating is 65,000 lb.

General Expressways, Inc., Chicago, has placed in service 125 International Model No. DCOT-405's. Units have Cummins NH-220 engines, 10-speed RoadRanger transmissions, Page and Page suspension with pusher axles and Eaton single-reduction 22,000 lb capacity drive axles.

U. S. Army Corps of Engineers has placed orders for 500 truck-mounted-crane-shovels from the KW-Dart Truck Co. Special tires are being supplied by the Gates Rubber Co. Each is a 14-ply military mud and snow type, size 12.00 x 20.

Chun King Sales, Duluth, Minn., a leader in the American-Oriental food industry has added almost a half million dollars worth of new equipment to the Orient Express—it's fleet. New additions include 10 Mack diesel tractors, six Fruehauf reefer vans with Thermo-King units, and four Fruehauf insulated vans.

Minneapolis Star and Tribune, Minneapolis, Minn., is now using two new International Model No. A-152's with nine-ft pickup body and special van insert. Trucks are used for country delivery runs, operate 16 hours per day.



The Hertz Corp. has announced that Hy Kromelow has been named Midwestern Regional Manager of Hertz's Truck Lease Division. His headquarters will be in Chicago.

Atlas Van Lines, Inc., Chicago, has a new president. He's O. H. Frisbie of O. H. Frisbie Moving & Storage Co., Detroit, Mich. Atlas Van Lines has 220 agents from coast-to-coast.



Avis Rent-a-Car is expanding its department store rental plan, bringing the total number to 20. Under the plan, store charge account customers can rent a car through Avis and charge it through their regular charge account with the department store.







PRODUCTS

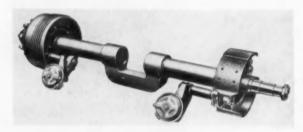
DESCRIBING RECENTLY ANNOUNCED PRODUCTS AND EQUIPMENT OF INTEREST TO MEN CONCERNED WITH TRUCK, BUS AND CONSTRUCTION FLEET MANAGEMENT



Closed-Circuit TV

from Industrial Products Div. International Tel. & Tel. Corp. 15191 Bledsoe St., San Fernando, Cal.

is now available for fleet use. The TV system permits watching a variety of operations from a single location. A terminal manager can check loading dock operations without leaving his desk. A dispatcher can check the yard, ready-line and loading areas without making a move. Result: constant control, less wasted time, and full-time supervision. Basic system consists of a vidicon camera, monitor and control unit. Camera features an electronic light compensator (no moving parts). It automatically adjusts to light changes over a wide range. Wide variety of accessories and housings are also offered.



Drop-Center Axle

from Transmission and Axle Div. Rockwell-Standard Corp. 100 Clark Ave., Detroit 32, Mich.

is designed for use with a single drive axle to produce a pusher type driving tandem. The Timken-Detroit Model No. TK-500 is said to give trucks and tractors all the payload advantages of a driving tandem but with less weight and lower cost. Ample propeller shaft clearance is achieved with the drop-center design. Axle has unit-mounted "P" Series power brakes with open type spiders. Spindles and axle are electronically butt welded together for extra strength. Axle itself is made from heat-treated seamless, tubular beam.



Lightweight Unloading Ramp

from Magnesium Company of America 5222 Indianapolis Blvd., East Chicago, Ind.

has a 1000 lb capacity, can be lifted and positioned by one man in seconds. Named the Magcoa Van Ramp, it's available in six models from 7½ to 18 ft long. Weight is from 48 to 137 lb. It is designed for truck or van loading and unloading wherever dock facilities are not available. Ramp is slightly over 33 in. wide, has narrow curbs to prevent run-off. A 9-in. upper lip anchors the ramp to the truck bed. Made of lightweight magnesium, it's weatherproof and will not rot, splinter or crack.

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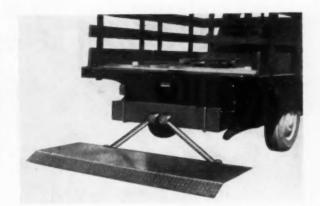
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Truck Lift Gate

from Curtis Automotive Devices
Westfield, Ind.

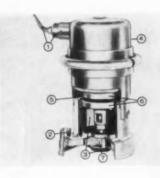
has a 1000 lb capacity and mounts on the chassis so not to strain or loosen the body. Named the Master Loader truck lift gate, it can be mounted on stake or dump bodies, side door delivery vans and walk-in models. Illustrated is the Model No. S-1000 for %, 1 and 1½-ton stake body trucks. Gate works by an electro-hydraulic system supplying power directly to gear-driven lifting arms. Engine power is not needed to operate it. Platform measures 54 x 28 in. and has safety catch locks at bed level and closed traveling position.



In-Tank Electric Fuel Pump

from Tokheim Corp. 1602 Wabash Ave., Fort Wayne 1, Ind.

is now available for all makes of trucks having any standard safety tank—cylinder, step or saddle-type. It is suspended from the top of the tank by an adjustable hanger which has a 12 to 26-in. range. The pump "pushes" fuel to the carburetor from the bottom of the fuel tank. It does not depend on suction like other pumps do. The Tokheim Model No. 558 has a hermetically-sealed electric motor which operates the pump by magnetic drive (see illustration). It positively eliminates vapor-lock, says Tokheim, and gives constant pressure and full fuel flow under all driving conditions. The pump is listed by Underwriters' Laboratories.

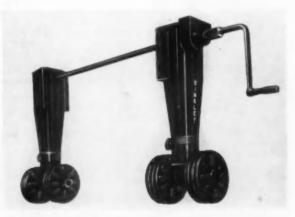


- Sealed cable, with beyond-type plugs
- Fuel supply time outlief
- 3 decisio feel inte
- d electric meter
- B head separates
- Brive is through ramic magnets
- (2) Lambadad Insuits

Two-Speed Landing Gear

from Binkley Mfg. Co. Warrenton, Mo.

features fast cranking with less work. It takes 10 crank turns per inch of travel in low gear, two turns per inch in high gear. The new landing gear has GM's Saginaw ball bearing screw and nut assembly to replace the conventional acme screw and nut. Called the Series 37000, it's offered in a full selection of mounts and travel. Binkley says it's rated to lift any payload on the highway today or in the foreseeable future.

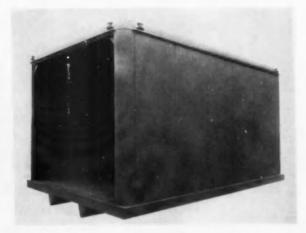


Pre-Fab Van Body

from Premier Mfg. Co. P. O. Box 22, Cincinnati 38, Ohio

comes in a sectionalized body kit and takes less than six man-hours to assemble. Called the Model No. KD 200 Van, it's said to be constructed with customized features found only on custom built bodies. Featuring all-steel construction, it is offered in lengths from nine to 20 ft. Heights are 78 and 84 in., outside widths are 92 and 96 in. A complete selection of doors is offered. Frame members, body corners and roof rails are made of 12-gage formed steel. Side panels are 16-gage cold rolled steel. Cross sills are set on 18-in. centers. Floors are %-in. laminated oak, shiplapped.

(TURN TO NEXT PAGE, PLEASE)



New Product Descriptions

Continued from Page 165

Vacuum Switch

from Fulton Sylphon Div. Robertshaw-Fulton Controls Co. Box 400. Knoxville 1. Tenn.

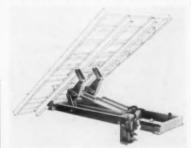
signals inefficient engine operation on engines using paper element air cleaners. The switch sounds an alarm

or lights a dashboard lamp when pressure in the air intake manifold falls below the danger point. Dangers of a restricted air flow include oil working past the intake valve stems. lack of lubrication of critically loaded bearings on turbo-charged engines and high fuel consumption.

Dump Body Hoists

from Hercules Galion Products, Inc. Galion, Ohio

use twin cylinders and are designed for use on tandom chassis. Available with either 7-in. or 8-in. twin cylinders, the lift arm hoists may be used under bodies up to 16 ft long on

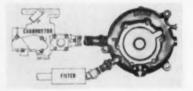


chassis with 84 to 120-in. C/T dimensions. The 7-in. model is for chassis up to 45,000 lb GVW, while the 8-in. model extends the GVW range to 70,000 lb. Travel of the hydraulic cylinder piston powers the lift arm with a smooth scissors type action. The hoists also feature tie-bar subframe construction for even distribution of the lifting forces.

LP Gas Regulator

from Ensign Carburetor Co. P. O. Box 415 1551 E. Orangethorpe Ave. Fullerton, Cal.

is designed for small engine applications where vapor is possible. The two-stage vapor phase unit uses vapor off the top of the fuel tank. The



Quit

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first stage reduces pressure from that encountered in the tank down to about 4 psi. The final stage regulator further reduces the pressure to slightly below atmospheric pressure to assure complete fuel lock-off when the engine is stopped. Made of lightweight alloy, the unit may be mounted in any upright position since water circulation is no factor.

Electric Tachometer

from Thomas G. Faria Co.

has two leads which connect to the ignition switch in series with the ignition coil. It is available in models

13 Joyce St., Niantic, Conn. (TURN TO PAGE 168, PLEASE)



Brown Cargo Vans

standard body construction . . . everywhere in the United States





Newspapers, Cookies, Motors

Quite a mixture for one load! Yet it's a daily feat for this Brown Aluminum Cargo Van, assigned a 400-mile multi-stop delivery schedule between Calgary and Edmonton. The secret: Movable dividers keep heavy motors from sliding into the bakery goods. Result: 2 Brown-equipped trucks do work of six smaller units.

Vault Storage in Tennessee

New Econ-OK-Pack vault storage system developed for do-it-yourself movers uses a modified Brown Aluminum Cargo Van Body with roller conveyors in the floor. Empty vaults are delivered to the customer and he packs his own furnishings. Vaults are then loaded into the warehouse truck by roller conveyors and liftgate.



Hauls Drugs in Indiana

Eli Lilly and Company, to haul drugs and supplies, needed a truck body that had side and rear openings with aluminum gates and roll-up tarps. Also, window in front of body, skylight in roof, steel mud fenders and six 2" tie rings in walls. The local Brown dealer could meet all these unusual specifications. Result: 8 Brown Aluminum Units are now on the job.



Smooth-Panel Units in Maryland

The Hecht Department Store of Baltimore when considering the purchase of truck bodies had one definite requirement: that the rear door be a roll-up type. The Brown dealer presented a superior door (and body) . . . got the order for four Smooth-Panel Aluminum Units. Like other users, Hecht expects the added advantage that his Brown bodies will outlast several chassis.

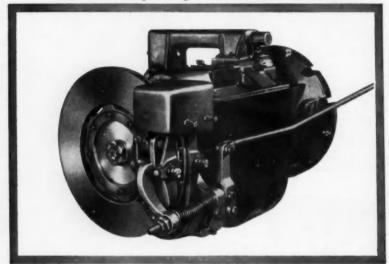


Brown is a trademark of Clark Equipment Company

CLARK EQUIPMENT COMPANY BROWN TRAILER DIVISION

Michigan City, Indiana

You Get Positive Protection Against Runaway or Parking Accidents When You Specify TRU-STOP Brakes



TRU-STOP brakes operate directly on the drive shaft. This means that they are not only excellent parking brakes, but dependable emergency service brakes as well. There's no dangerous self-energizing. TRU-STOP brakes have the surplus capacity for repeated use as an auxiliary to service brakes.

100% Ventilation Minimizes Fading

Brake efficiency depends on ability to dissipate heat rapidly and so prevent fading. TRU-STOP brakes are 100% ventilated. Discs are exposed to air even while braking. The TRU-STOP ventilation system circulates air between the disc plates.



Longer Life with Uniform Brake Pressure

The discs of TRU-STOP brakes are squeezed between the flat surfaces of the shoes. The brake lever operates both the front and rear lever arms simultaneously, and pressure is exerted on the center of each shoe. This puts the entire lining surface in contact, provides for even wear. TRU-STOP brake linings are easy to replace.



FOR POSITIVE PROTECTION...

Specify TRU-STOP BRAKES on

ANY Heavy-Duty Equipment that Requires Braking

Automotive and Aircraft Division

AMERICAN CHAIN & CABLE



601 Stephenson Bldg., Detroit 2 6800 East Acco Street, Los Angeles 22 • 929 Connecticut Ave., Bridgeport 2, Conn.

New Products

Continued from Page 166

for rpm ranges of 0-4000, 0-5000 and 0-6000. It features a sealed aluminum case, red pointer and a translucent plastic dial back-lighted by a built-in lamp. The unit may be mounted on the steering post, dash, or in the panel.

Air Wrenches

from Chicago Pneumatic Tool Co. 6 E. 44th St., New York 17, N. Y. feature a new "Flip-'n-Fit" socket designed to eliminate hub-rim clearance and socket-change delays while removing nuts from passenger car wheels. Two models are available.

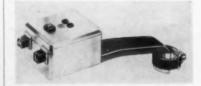


Both have a two-inch shank, a variable torque output control, and a tapered protective tool nose cap. The flip socket (13/16 in. hex at one end, % n. hex at the other) and the ½ in. square drive in the middle eliminate the need for the operator to change sockets.

Turn Signal Switch

from K-D Lamp Co.
1910 Elm St., Cincinnati 10, Ohio
is push button operated. Push "L"
button for left turns, "R" button for
right turns. Push both buttons for

One



four-way signal flashing. Top "C" button cancels. It's called the Model No. KD 723 Turn Signal Control.

(TURN TO PAGE 172, PLEASE)

COMMERCIAL CAR JOURNAL, January, 1959

Belden WIRES CABLES CORDS WIRE

Primary Wire For the Hot Spots

Ask Your Belden Jobber

Engineered for use in the hot engine compartments. Silicone Rubber Insulation withstands extreme heat from exhaust, manifolds, and all other hot spots. Glass braid protects against fire, and nylon jacket resists effects of gasoline, oil, anti-freeze, and steam cleaning fluids.

S.A.E. Types I and II

—A.T.A. Color Coding

Now available in all standard A.T.A. colors! Tough Plastic Insulation with low moisture absorption; resists flame, oil, gasoline, grease, acid, fungus, and most solvents. Flexible at low temperatures — high dielectric — high temperature stability. Sizes 20 to 8.

S.A.E. Type II extra heavy-duty construction for all frame and exposed wiring requirements. Sizes 16 to 10.

Neoprene Trailer Cable—with A.T.A. Circuit Coding

Two, four, six, and seven conductor flexible stranded cable for all electrical hook-ups between tractor and trailer—marker and clearance lamps, directional signals, stoplights, and auxiliary lighting. Neoprene sheathed to resist oil, grease, road tars, and weather.

Also Heavy-Duty Duplex Cable— Battery Cable—Terminals— Spark Plug Wire—Wiring Kits

One Wire Source for Everything Electrical and Electronic

Belden
WIREMAKER FOR INDUSTRY
SINCE 1902
CHICAGO

0770118

Belden
WIRES CORDS
WIRE

Magnet Wire * Lead Wire * Power Supply Cords, Cord Sets and Portable Cord * Aircreft Wires Electrical Neusehold Cords * Electronic Wires Welding Cable * Automotive Wire and Cable

Here's why Champion gives in spark plug and ignition



Champion Field Engineer Howard Tranum (center) and L. R. Craig (right), Champion Territory Representative, check for proper distributor advance on an LPG-powered truck for R. H. Wallace, mechanic at General Gas Corporation of Baton Rouge, La. (See Service Tip.)

ENGINE R.P. M.

EXCLUSIVE TECHNICAL HELP



COMMERCIAL CAR JOURNAL, January, 1959

you <u>more</u> performance



Champion "know how"—put to work in your fleet—gives you the best possible ignition performance. And Champion has experienced representatives ready to help you. They're backed by the world's largest research and engineering organization devoted exclusively to spark plugs. And Champion's wealth of "know how" is kept fresh and growing by Field Engineers, experts who tackle new or unusual on-the-job situations. This exclusive service is available to all Champion users. If you are interested in better performance, call your Champion representative or supplier.

18 of 21 truck makers choose

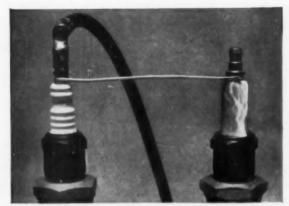
CHAMPION

SPARK PLUGS



CHAMPION SPARK PLUG COMPANY . TOLEDO 1, OHIO

COMMERCIAL CAR JOURNAL, January, 1959



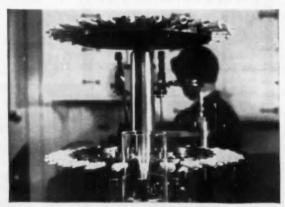
EXCLUSIVE PRODUCT FEATURES

Here's how Champion's exclusive 5-rib design gives you better performance. Both plugs have the same voltage applied, but the 5-rib Champion insulator offers far greater protection against flashover—gives you easier starting and longer battery life in the cold, damp days ahead.



RESEARCH AND PRODUCT DEVELOPMENT

At Champion's Research and Engineering Center, experts use test engines to experiment with various electrode alloys, seeking out those which give you even longer spark plug life. Continuing research like this is another reason why Champion gives you more in ignition performance.

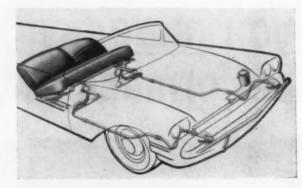


QUALITY CONTROL

Here sample insulators made from every batch of Champion ceramic material are blasted with cold air before and after entering a 2400-degree flame. Champion's exacting quality control assures you of maximum resistance to breakage, gives you top performance with lowest possible replacement costs.

Front Seat Tilts in Accidents

A new device aimed at protecting front seat occupants in front-end collisions has been introduced by Protect-omatic Corp., Tonawanda, N. Y. At speeds above seven mph any impact over 16 lb against the trigger bar on the front bumper causes fluid to rush through the system and tilt the seat backwards. Two scissor-like linkages under the front seat pull the seat forward on slides and tilt it backwards to a 30 deg angle. Tilted at this angle, the occupant absorbs the force of the collision with his hips and thighs rather than crashing forward into the dashboard or windshield with his head and chest. Cost is \$300 to \$500. Unit was demonstrated in test collisions at the National Safety Congress in Chicago.





... Do You have the K-D BATTERY HANDLER in your Shop?

Handles all sizes, 6 and 12 volt, passenger...

New Products

Continued from Page 168

Fuel Line Filter

from American Liquid Gas Corp. 1109 Santa Fe Ave. Los Angeles 21, Cal.

was specifically designed for LP Gas, but may be used for gasoline or other hydrocarbon fuels. Labeled Model No. 400, it's made of machined brass,



has a replaceable powdered brass element and Buna-N "O" ring seal. It is 111/16 in. long and has ¼-in. N.P.T. inlet and outlet. The twopiece threaded body disassembles easily for cleaning or element replacement.

Radio Repeater Station

from Allen B. Du Mont Laboratories, Inc. You

Proof

750 Bloomfield Ave., Clifton, N. J. combines the communications channel and relay channel circuitry and all interlinks in a single cabinet. Designed for land-mobile systems which allow cross-over of frequency bands, it is available for combinations of the 25-54 mc band with either the 144-174 (TURN TO PAGE 174, PLEASE)

COMMERCIAL CAR JOURNAL, January, 1959



Economy for any hauling situation. Mack Model B trucks and tractors offer conventional-design units for almost any hauling need. Diesel or gasoline engines. Include weight-reduced models and compact models—89" from bumper to back of cab.

MACK ... first name for truck economy

You can get proof today of Mack's unbeatable economy—

Proof that Macks have the lowest running costs in their class Proof that Macks have the lowest upkeep costs in their class

Proof that Macks offer the longest dependable mileage life of any truck

How do you get verification of these facts? Simply ask your Mack branch or distributor for the names of nearby Mack users. Let them show you how they have found Macks to be the most economical, dependable, high-earning units they've ever run. Mack Trucks, Inc., Plainfield, New Jersey. In Canada: Mack Trucks of Canada, Ltd.

Economy for city-and-highway operations. Mack Model N trucks and tractors are tilt-action, low-silhouette COE's, less than 83" from bumper to back of cab. They're designed for superior performance in and out of congested areas, and for maximum loads where bridge-formula restrictions do not apply. Diesel and gasoline models.

Economy for long hauls. Mack Model H tractors are tilt-action COE diesels with road-commanding height. Less than 67" from bumper to back of cab (without sleeper), they're designed to haul maximum loads in bridge-formula areas.



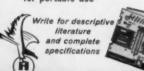


- · exclusive new jet-type burner provides high-volume heated air
- · 24-hour maximum heat output - at very low cost
- · no electrical power required
- · fully automatic thermostatic control - no "hot spots" - no "cold spots"
- · no moving parts minimum maintenance
- · conform to ICC safety regulations
- compact—use less cargo space
- · operate in coldest weather no flame-out
- heat rating 16,000 BTU/hr.

MODEL UH-98

for permanent installation

MODEL UH-99 for portable use



HEATING AND REFRIGERATION SYSTEMS

New Products

Continued from Page 172

mc or the 450-470 mc band, and for the 144-174 mc with the 450-470 mc band. Indoor or outdooor cabinets are available

Powdered Degreaser

from Stewart-Hall Chemical Corp. P. O. Box 66, Fleetwood Station Mount Vernon, N. Y.

is dissolved in water (5 oz per quart) to produce a decarbonizing and degreasing solution. The manufacturer



claims the solution quickly loosens carbon, grease, tar and other deposits from carburetors, pumps and other small parts. The product is said to be safe for use on metal, plastic and rubber materials, and easy on mechanics' hands.

Multi-Point Flush Lock

from Forge and Fittings Div. H. K. Porter Co., Inc., Cleveland

Forge Works,

3270 E. 79th St., Cleveland, Ohio is designed for use on light doors, compartments and utility closures.



Made for two and three-point installations, the lock is used on both right and left hand applications. Two and three-point flush locks are supplied with standard 24-in, slotted connecting bars for assembly with drop forged end bolts.

Piston Ring Sets

from Ramsey Corp. St. Louis, Mo.

extend the re-ring application of Ramco's "10-Up" extension rings to 28 truck and tractor models. The

The Only Safe Way

NEW

Trip Bo



TO CHANGE TUBELESS TIRES

on Light-Duty Vehicles

Tire manufacturers' recommendations must be followed when mounting and demounting 14" and 15" tubeless tires on small commercial trucks and other light-duty fleet vehicles. These include the use of an approved lubri-

RuGLYDE is THE approved tire lubricant-the only rubber lubricant that speeds and simplifies tire changing without endangering the air seal, rubber or paint finish in any way! RuGLYDE permits perfect bead seating—prevents "after-slippage" and tire "thumping"—and will not induce

and Large Heavy-Duty Trucks

The need for RuGLYDE for larger truck tubeless tires is even more urgent. Applied to bead and rim, RuGLYDE eases the difficult job of seating the tighter and heavier bead on the tapered rim . . . prevents scuffing . . . protects the air seal. A "must", too, for tube and flap assem-

RuGLYDE is also an ideal "cleaner" for making tires and rubber accessories look new. Use on lube-rack, too. Its deep penetrating action makes it unexcelled for squeakproofing rubber parts and fittings.

See your jobber or write



AMERICAN GREASE STICK COMPANY MUSKEGON, MICHIGAN

COMMERCIAL CAR JOURNAL, January, 1959





new sets are chrome railed and include either the C-9, U-Flex or Spiro-Seal oil rings. A new ER series extends the circumferential expansion action principle for use on rebored engines, too.

"Battery Bib"

from R. E. Dietz Co.
225 Wilkinson St., Syracuse 1, N. Y.
is a polyethylene sheet perforated to
fit snugly over filler plugs and battery terminals. It covers the whole



battery top protecting it from oil, water, grease and corrosive action of acid fumes.

Steel Cord Tire

from Firestone Tire & Rubber Co. 1200 Firestone Pkwy., Akron 17, Ohio is said to give up to twice the original mileage on drive wheels compared to textile cord constructed tires. Called the Firestone W-2 Steelcord tire, it has one steel ply running straight from bead to bead and is fortified with up to five bands of steel cords in the crown area. Firestone says the tire runs up to 100 deg cooler, gives better traction because of larger and longer "footprint," and greatly increased resistance to impact and punctures. It's available in sizes 8.25-20, 9.00-20, 10.00-20 and 10.00-22.

Truck Tire

from Cooper Tire & Rubber Co. Findlay, Ohio

is called the Road-Grip Super Tread. It has 79 per cent deeper tread and with new CSA No. 6 tread rubber delivers up to twice the mileage of conventional highway truck tires, says Cooper. "Hi-T" Nylon cord body is said to permit four and five recaps.

Rod Mandrels

from Sunnen Products Co.

Dept. A-11, 7910 Manchester Ave.,
St. Louis 17, Mo.

expand the company's line of connecting rod reconditioning mandrels (journal end) to cover larger en-(TURN TO NEXT PAGE, PLEASE)

Would you like to have your fleet supervisor ride on every trip of each truck... without leaving his desk?



WAGNER- TACHOGRAPH "supervises" every movement of truck from start to return

When you equip your trucks with TACHOGRAPHS it's like having your fleet supervisor ride on every trip...without leaving his desk. Tachograph is mounted on dashboard. Chart, placed inside the instrument before each run, makes a graphic record of time of operation, duration of stops, speeds and distances traveled.

These graphic reports of every run...help cut unscheduled stops, help you plan better routing, control vehicle speed, and lower operating costs by encouraging savings in time, gas, oil and tires. Get details. Mail coupon for Bulletin SU-3.



CHART TELLS ALL



Wagner Electric Corporation 6476 PLYMOUTH AVE. ST. LOUIS 14, MO.

Please send a copy of Bulletin SU-3

Name		
Company		
Address		
City	State	
We operate	Vehicles	WS58-7

New Products

Continued from Page 175

gines. Designed for use on Sunnen's honing machine, the mandrels each cover a 0.200 in. diameter range. With the new units, mandrels for diameters from 1.5 to 4.700 in. are available. All use standard CR type stones and shoes.

Battery Powered Jack

from Crown Controls Co. New Bremen, Ohio

eliminates the need for air lines or electric cords. Rated at 1% ton ca-



pacity, the jack uses a 12-volt automotive battery, built-in automatic charger and hydraulic gear pump. All are self-contained in the power case at the rear of the jack. Manufacturer states the jack will lift a cars 30 in. in 10 seconds. The unit weighs 193 lb, has rear swivel casters and wide spread handle grips for easy spotting.

Steam-Hydraulic Cleaner

from Hypressure Jenny Div. Homestead Valve Mfg. Co. Coraopolis, Pa.

offers single-lever selection of 11 different cleaning actions. Known as the "3500" Series, the unit has a 360 gph pump and provides outlet pressures of up to 300 lb, with temperatures of up to 325 deg F. Trailermounted, shop portable, or stationary models are available, with a choice of oil or gas for fuel.

Loading Ramp

from American Dockbridge, Inc. 235 W. Oklahoma Ave. Milwaukee 1 Wis.

has an automatic system which adjusts the ramp's level to that of the truck at the dock. The ramp may be raised to 16 in. above dock level and lowered 10 in. below level. The system starts when an arriving truck makes contact with a push bar, returns to dock level when the truck leaves. The ramp may be recessed in the dock floor or placed in front of the dock on four legs. It is available in 6, 8 and 10-ft lengths and is six feet wide.

Plastic Clearance Light

from Warren Mfg. Co. Warren, Pa.

is %-in. thick, 21/2-in. high and mounts flush for non-penetration of



van bodies. Known as the Starline Model No. D-5, it's made watertight by an internal "O" ring seal of lens to housing. Pryoff-snap-on lens re-



Optimum Chemical, Beverage, Food Payload with Litewate Portersville Stainless Tanks



Engineered to eliminate every ounce of needless weight for optimum payload. Exclusive Portersville reinforcing rings at stress points assure you of extra mileage per tank. Portersville micro-smooth stainless steel tank interiors exceed sanitary requirements while cutting cleaning costs.

Send your tractor data and commodity requirements to our engineering department. We'll send you a Portersville Loading Diagram designed to fit your requirements.

Portersville Stainless Equipment Corp.

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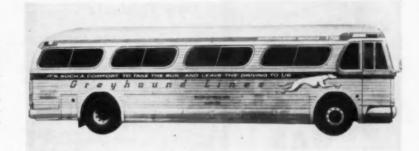
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Greyhound's Slogan

"It's such a pleasure to take the bus... and leave the driving to us" is Greyhound's famous slogan displayed on the sides of its buses. To get uniformity on all its buses, Greyhound is using decals from the Meyercord Co., Chicago. Greyhound reports less bus down time for installation plus longer life than paint.



quires no tools for servicing. It's available in clear, red, amber or green and surpasses SAE candlepower requirements, says the maker.

Power Take-Off

from Arrow Gear Co.
P. O. Box 547, Broken Arrow, Okla.
is designed to fit the Model No. 9100
New Process transfer case used on
International Model No. A120 4 x 4
and Dodge Model Nos. W100 and
W200. It has a double-end output



shaft. Both ends are 1% in. round. Manufacturer reports that it will transmit the full torque of the transfer case and needs no adapter plate to fit the power take-off opening.

Engine Pre-heater

from Tech Products, Inc. 615 Pennsylvania Ave. Elizabeth, N. J.

employs the thermo-syphon system. Mounted in the coolant circulation line, it has an electrically operated heater unit which may be plugged in to any convenient outlet. An automatic thermostat controls the heater's operation, turning it on when the temperature drops and off when the (TURN TO NEXT PAGE, PLEASE)

FAST-EASY TO POSITION...LIFTS 9 TONS



SPEEDS UP LIFTING HEAVY TRUCKS FOR

TIRE & BRAKE SERVICE

MECHANIC WORK



BRANICK AIR-OPERATED TRUCK JACK

BUILT FOR YEARS OF TOUGH SERVICE—Rugged 121/4 in. diameter cylinder is honed to give smoother action and longer cup life. Double cup construction maintains reservoir of oil on top of piston. Cylinder wall is bathed in oil each time jack is raised. All these features mean years of trouble-free service. Thoroughly tested, inspected and guaranteed for I year against defects in material and workmanship. Adapters for various heights are available. Any over-all height jack con be made on request.

- FAST . . . Raises heavy truck axles in 15 seconds.
- POWERFUL , . . Lifts 9 tons with 100 lbs. of jack air pressure. Use as scale—each 20 lbs. of air in jack lifts 1 ton.
 - EASY TO HANDLE . . . After positioning lack place your air line chuck to valve near end of long handle and axle is up in 15 seconds. Touch at finger to cam operating air release valve lowers jack. Ne need to stand and hold valve open.
 - SAFE . . . Eliminates crawling under truck body to place jack under axie.

BRANICK PRODUCTS CO. Inc. FARGO BOX 1937 NORTH DAKOTA



Do your trucks seem to be using too much gas? Here's a device that measures how much fuel is actually going through the engine. With it you can reveal and control unusual gasoline expenditures.

The "Fuelometer" makes record keeping a snap! A counter records up to 9999.9 gallons and then repeats.

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Write for full information

The SERVICE RECORDER CO.

1013-F Rockwell Ave., Cleveland 14, Ohio

New Products

Continued from Page 177

normal engine temperature has been reached. Models are available for trucks, buses and passenger cars.

Tire Changer

from Bishman Mfg. Co. Osseo, Minn.

features a double bead breaker built onto the unit. Both beads can be broken at one time or separately. Wide circle breaker shoes roll beads off and drop them into the center



well with one stroke. Double bead breaker is available on the electrically-powered Model No. 880-MB and the hand-operated Model No. 881-MB. Both handle tires from 12 through 17½ in.

Driver's Log Book

from Truckers Specialty Printing Co. 510 S. 7th St., Minneapolis 15, Minn. has the standard BMC 59 form prescribed by the ICC and a short-form Vehicle Condition Report. In addition, there's a plastic slide-rule lineguide attached to each book to help drivers draw vertical and horizontal lines neatly when filling out the forms. Each log sheet has an Hour Recap section. Get a free sample by writing to the above address.

Diesel Fuel Additive

from Nutmeg Chemical Co., Inc. 138 Haven St., New Haven, Conn. is said to increase power and performance on all types of diesel equipment. The manufacturer states it reduces multi-shifting on grades, gives quick starts and, in fleet tests, shows a five per cent fuel saving. The con-

centrate additive, called Power-Pal, prevents corrosion of fuel injectors since the blend of solvents prevents moisture build-up. One ounce of Power-Pal per 25 gal of diesel fuel is recommended dosage.









Classified Advertisement

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Reinforced Tire Chains Still Best, Study Shows

TRACTOR-TRAILER behavior on ice is the subject of an interesting study made by Professor Archie H. Easton, director of the University of Washington Motor Vehicle Research Laboratory.

Speaking at the University of Virginia before the first International Skid Prevention Conference, he said that the type of trailer has a significant effect on its stability

Tests conducted on ice-covered Pine Lake near Clintonville, Wis., and on slippery roads, showed that loaded single axle trailers appear to be the most stable. Standard tandem proved to be a close second. Western tandem and the spread tandem were considerably less stable.

Traction and braking tests showed

the following. They are listed in order of increasing effectiveness.

Smooth tires-very poor in cornering. Should not be used under ice and snow conditions.

Regular tires-inadequate under many winter conditions

Winterized tires-provide better traction on ice, not much improvement in snow.

Mud-snow, modern design-provide better ice and snow traction than regular tires.

Embedded metal coils, serpentine ribs-better than mud-snow type, particularly effective on wet ice.

Wheel sanders-good traction performance on ice

Round-wire tire chains-good stop and go performance on ice and snow. Side-skid resistance poor compared to reinforced tire chains.

Reinforced tire chains best in overall performance on ice and snow.

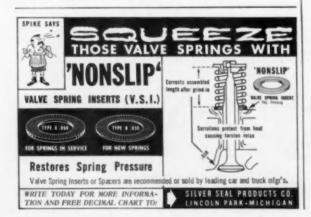
Front-wheel drive on tractor-trailer

combinations is most effective in pulling out of a jackknife, the tests revealed. Powered front wheels tend to "pull" the rig out of jackknifes since there is better steering control.

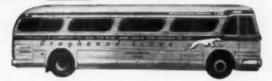
The study further showed that experienced drivers when thrown into a jackknife, use mainly steering to recover.

Braking distances on

winter surfaces are in the order of three to 12 times as great as those on bare pavement. In addition, tests showed that the most hazardous surface condition is ice near or at the freezing point.



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Meyercord Decals on your rolling stock can give your TV slogan, firm name or product reproduction . . . extra mileage! Whatever you make or merchandise—bread, beverages or beef . . . in cans or containers . . . anything from milk to missiles—Meyercord Decals, year after year, deliver many thousands of miles of effective circulation, as well as added parking profit. Greyhound's famous slogan sells travel . . and travelling busses sell the slogan. Meyercord Decals are tough and durable . . . keep their smart appearance in all kinds of weather! They are easily applied to painted or bare metal surfaces . . . require a bare minimum of layup time. Mark your trucks, busses or fleet cars the modern way—with Meyercord Decals!

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draws cold water from the engine, heats it, then circulates it back through the engine. No need for heated terminals. Engines remain warmed-up; seart quickly. You don't use as much fuel and spend less on repair bills. Four KIM models are available. Installation is simple. See your automotive supplier or write for literature.

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5,000 TO 19,000 lbs. GVW UP TO 35,000 lbs. GCW FROM \$1,791*

A Studebaker Truck is a Sound Investment

Each vehicle in the Studebaker line is an excellent product, built to do an honest day's work. The trucks are functional, carefully designed and carefully built vehicles, engineered for years of hard labor with a minimum reinvestment in excessive maintenance and repair. The engineering department at Studebaker has taken great care to ensure minimum and rapid maintenance on each truck. Running gear and engine components are unusually accessible to keep downtime low and keep trucks out where they belong ... earning money. There is absolutely no "gadget" engineering, but there are many extras and optional equipment designed to adapt each truck for whatever specialized use the owner requires. This provides a broad base of flexibility for each vehicle. Through very slight additional cost, Studebaker trucks can be equipped to handle an amazing range of jobs. An excellent

case in point is the pick-up or stake body on the 4-wheel drive truck with axle ratios ranging from 4.89 to a very low 5.14. With power take-off, there's virtually no end to the jobs this truck can handle, at surprisingly low cost.

Attention to engineering detail is unrelenting. For example, a new Berlin eye was recently installed on semi-elliptic springs, improving stress distribution. As a result, spring life and efficiency have been boosted substantially. Now, Studebaker's limited-slip differential is available on many models. So is the exclusive Hill-Holder for better control on steep grades. Engines can be had from 170 cu. in. to 289 cu. in. and up to 225 hp. In brief, Studebaker has a competitively priced truck for virtually any job. Get the full story from your Studebaker dealer or clip this coupon and mail it.

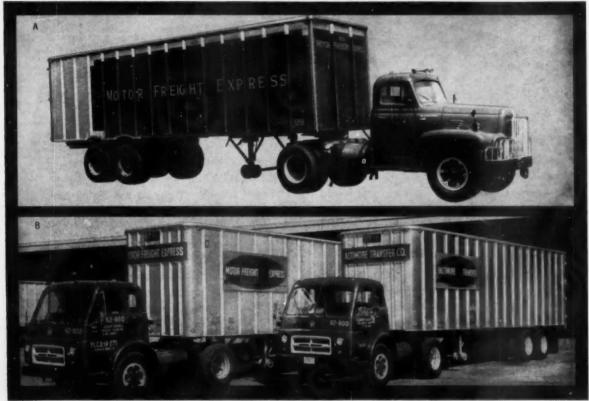
*Transportation from South Bend and local taxes additional



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Baltimore Transfer Company Completes Twenty-Five Years of Profitable Payloading With

TRAILERS OF ALCOA ALUMINUM



A—Light in weight, versatile and durable is the way to describe this unit built by Baltimore Transfer in 1946. After 200,000 miles it was still in perfect condition, so when additional cubage was needed, it was rebuilt in 1952 by raising the roof and adding several feet to the rear.

B—Two new trailer units built by Gindy Manufacturing Company indicate Baltimore Transfer's long-term satisfaction with all-aluminum construction. Lightweight, corrosion-resistant, maintenance-free Alcoa® Aluminum assures long life in rough over-the-road general freight service.

Today Gindy Manufacturing Company supplies the same basic external post design that conclusively proved the case for all-aluminum construction in 1932. Baltimore Transfer Company, Baltimore, Md., working closely with Alcoa's Development Division, actually pioneered the use of all-aluminum construction for highway trailers. The first

trailer was designed for a payload of 24,000 pounds; tested with a 50,000-lb load over the roughest roads that could be found, it was learned that no detectable set had been induced. Six more trailers were immediately started.

Today, more than 500 trailer units later, Mr. Ward L. Bennett, Superintendent of Automotive Equipment for Baltimore Transfer, says: "For the past twenty-five years, the Baltimore Transfer Company has used external post aluminum trailers. Such construction is extremely durable and also economical to maintain and repair. And all-aluminum construction has helped us to maximize payload on every trip."

Your Guide to the Best in Aluminum Value





COMMERCIAL CAR JOURNAL, January, 1959



The genii touch



comes to trucking

ANNOUNCING DIAMOND T PRESTO-MATIC

A button (believe it or not)
replaces the clutch pedal
...eliminates
clutch pedal fatigue!

PRESTO-MATIC makes truck driving easy! No clutch pedal is required in Diamond T diesels. This new semi-automatic transmission system has a simple touch-button control on top of the gear shift lever. The slightest touch automatically operates the clutch.

Only Diamond Thas it

This exclusive Diamond T bonus is a low cost option with Spicer 5-speed and 12-speed synchro-mesh transmissions and 2-plate clutches. Presto-matic is positive, foolproof. No pumping losses, no power losses, no fuel waste. Best of all, it is driver controlled. Service is simple, no special tools required.

Smooth engagement from a standing start is automatic. A sensing mechanism synchronizes the action of the clutch to engine speed, exactly as an expert driver would if using a pedal. Full engagement is effected before the engine builds up to maximum torque.

When the engine returns to idling speed the clutch is automatically disengaged. The combination of these two automatic actions enables a driver to inch along in heavy traffic—without ever touching the control or shifting gears, just as he would with a fully-automatic transmission.

Simplicity of design and rugged construction are combined to make the Presto-matic the most reliable and most durable as well as the lowest cost semi-





Diamond T Model 921FR-SLDD with Presto-matic transmission

automatic transmission system on the market today.

A Diamond T first

The Presto-matic is another Diamond T first. Engineering leadership, combined with Diamond T custombuilding, assures outstanding value, and there is a Diamond T for every heavy-duty job. Your Diamond T dealer will be glad to work out specifications of the model that will do your job best. It will pay you to see him before you buy.

DIAMOND T TRUCKS

Established 1905



The Diamond is for Quality